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AFCRL INFRARED SKY SURVEY. VOLUME I. CATALOG OF  
OBSERVATIONS AT 4, 11, AND 20 MICRONS

Russell G. Walker, et al

Air Force Cambridge Research Laboratories  
Hanscom Air Force Base, Massachusetts

14 July 1975

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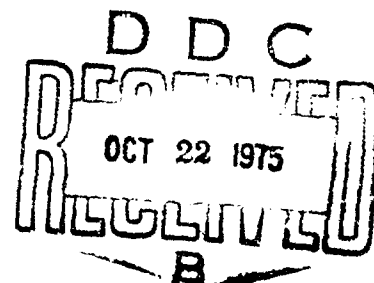
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**AFCRL Infrared Sky Survey**  
**Volume I. Catalog of Observations**  
**at 4, 11, and 20 Microns**

**RUSSELL G. WALKER**  
**STEP-IAN D. PRICE**

14 July 1975



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## Preface

Performance of a rocket-borne infrared sky survey requires a team effort. Many individuals and organizations have contributed significantly to various aspects of the program.

The telescope was developed at Hughes Aircraft Co. under the guidance of Jackson Steffes, Richard Heddon, and John Heintz.

Both the rocket attitude control system and payload recovery system were developed at Space General Corp (now Aerojet Liquid Rocket Co.) under the direction of Mike Watson and Clifford Chalphant. Special thanks go to Joe Meyer, John LaBuda, William Frognone, Arthur Takeda, and Philip Meridith for their engineering genius and excellent field support.

The rockets were prepared and launched by the U.S. Naval Ordinance Missile Test Facility. We are especially grateful for the untiring support of "Gunner" Lloyd Briggs (USNOMTF), Ray Petracek (ALRC), Gordon Haiken (ALRC), and Fred Lemmon (NMSU).

Overall design of the payload instrumentation system and telescope mounting was performed by the Aerospace Instrumentation Laboratory of AFCRL under the direction of C. Nealon Stark, whose depth of experience and engineering ingenuity were largely responsible for the success of the rocket program. We wish to particularly acknowledge Paul Hartnett, Daniel Nardello, Ed LaBlanc, Larry Smart, and Thomas Campbell of the Wentworth Institute for their contributions to fabrication, integration, and field support of the payload system; and Charles Howard, Raymond Wilton, William Miller, Eban Hiscock, and Philip Gustafson (all of AFCRL) for their valuable technical inputs and coordination of group efforts.

The dual FM/PCM telemetry systems were built and prepared by Richard Buck, Dale Costner, and Claude Gwinn of Oklahoma State University.

Design and development of the stellar aspect system, alignment of the optical sensors, refurbishment of the infrared telescope between flights and preparation of the telescope for flight was accomplished in the Optical Physics Laboratory of AFCRL by Peter C. Tandy, David Akerstrom and Michael Mitchell under the direction of Charles V. Cunniff. Anthony D'Agati supplied launch window calculations, advice and numerous computer routines necessary for display and analysis of the flight data. Computer reduction of the vast quantities of flight data was facilitated by Leonard Marcotte and his intimate knowledge of the AFCRL CDC 6600.

We are indebted to Dr. Thomas L. Murdock for his many helpful discussions and assistance in the field.

We would like to thank J.W. Sulentic and W.G. Tifft for supplying us with their RNGC catalog on computer tape produced under NASA Grants NGR 03-002-032 and 03-002-091. We are also grateful to R.S. Dixon for a copy of the OSU radio survey on tape.

This program was sponsored in part by the Advanced Research Projects Agency. We are grateful to Mike Dow, Robert Paulson and James Justice for their support.

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# AFCRL Infrared Sky Survey

## Volume I. Catalog of Observations

### at 4, 11, and 20 Microns

#### 1. INTRODUCTION

During 1971 and 1972, the Air Force Cambridge Research Laboratories conducted a survey of the sky in the intermediate infrared spectral region. The objective of this was to obtain the brightness and spatial distribution of a representative sample of the types of celestial objects that emit strongly in the infrared. Of primary concern was the determination of the positions of unusual sources of emission with sufficient accuracy to enable them to be acquired by ground based telescopes for further detailed investigation.

#### 2. INSTRUMENTATION

The survey was performed using a small cryogenically cooled rocket-borne telescope. Interference filters placed in the cross scan direction in front of a multi-element detector array located at the telescope focal plane, permit almost simultaneous measurements in three spectral regions. The three bands have effective wavelengths of 4.2, 11.0, and 19.8 microns and bandwidths of 1.5, 5.1, and 5.6 microns respectively.

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(Received for publication 10 July 1975).



Figure 1. Distribution of 4.2 Micron Sources Plotted in Celestial Coordinates



Figure 2. Distribution of 11 Micron Sources Plotted in Celestial Coordinates

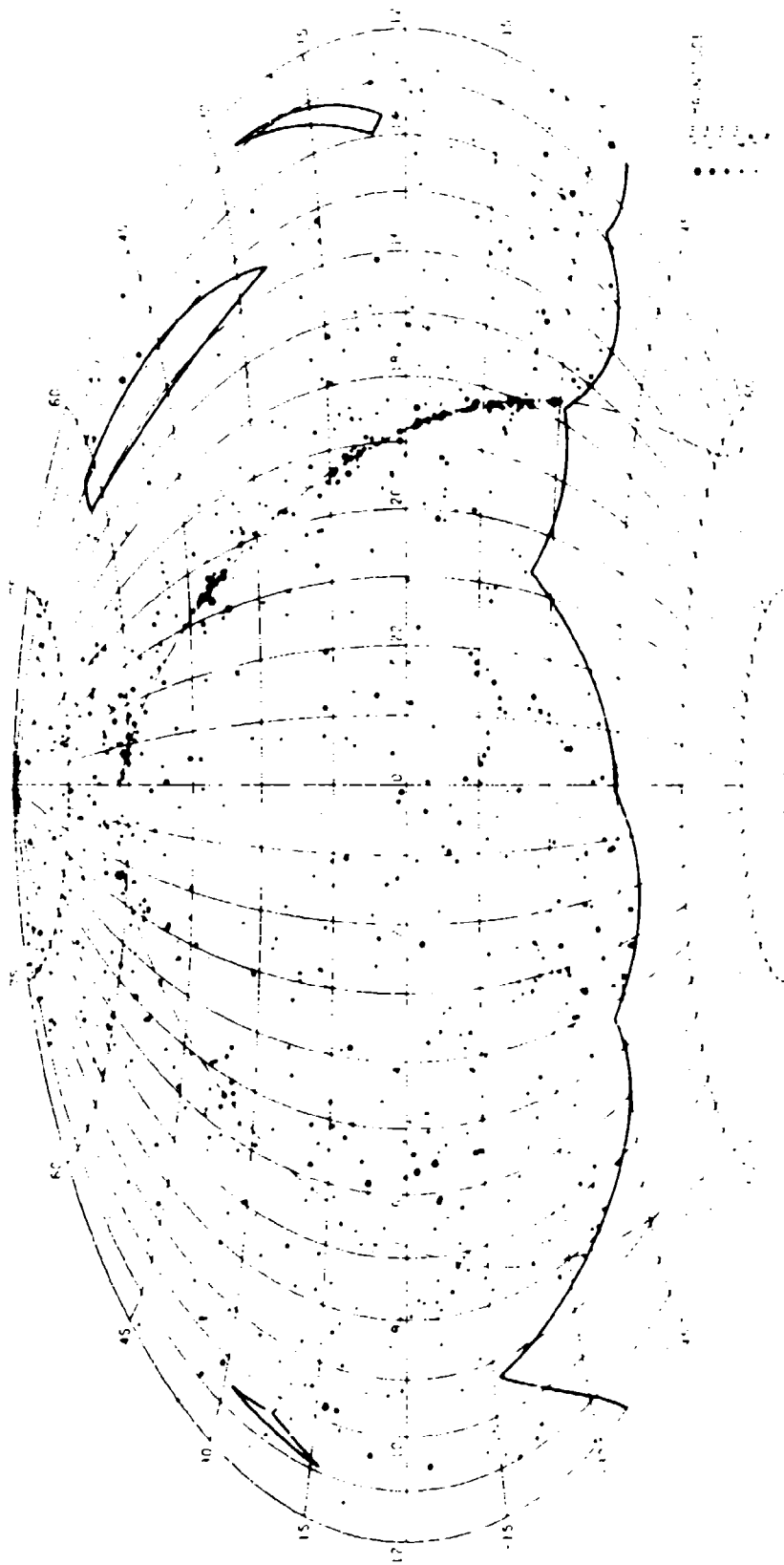


Figure 3. Distribution of 19.8 Micron Sources Plotted in Celestial Coordinates



Figure 4. Distribution of 4.2 Micron Sources Plotted in New Galactic Coordinates

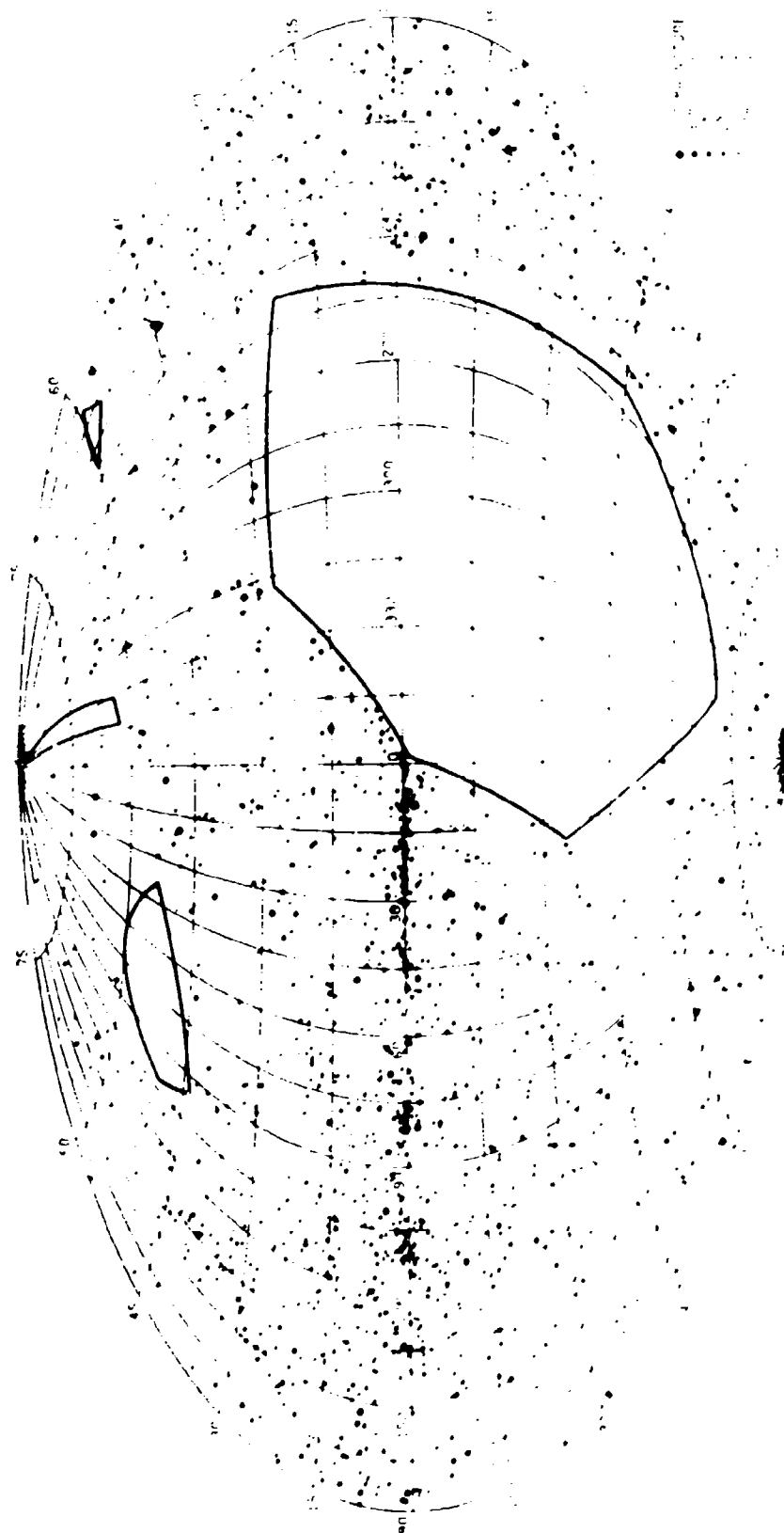


Figure 5. Distribution of 11 Micron Sources Plotted in New Galactic Coordinates

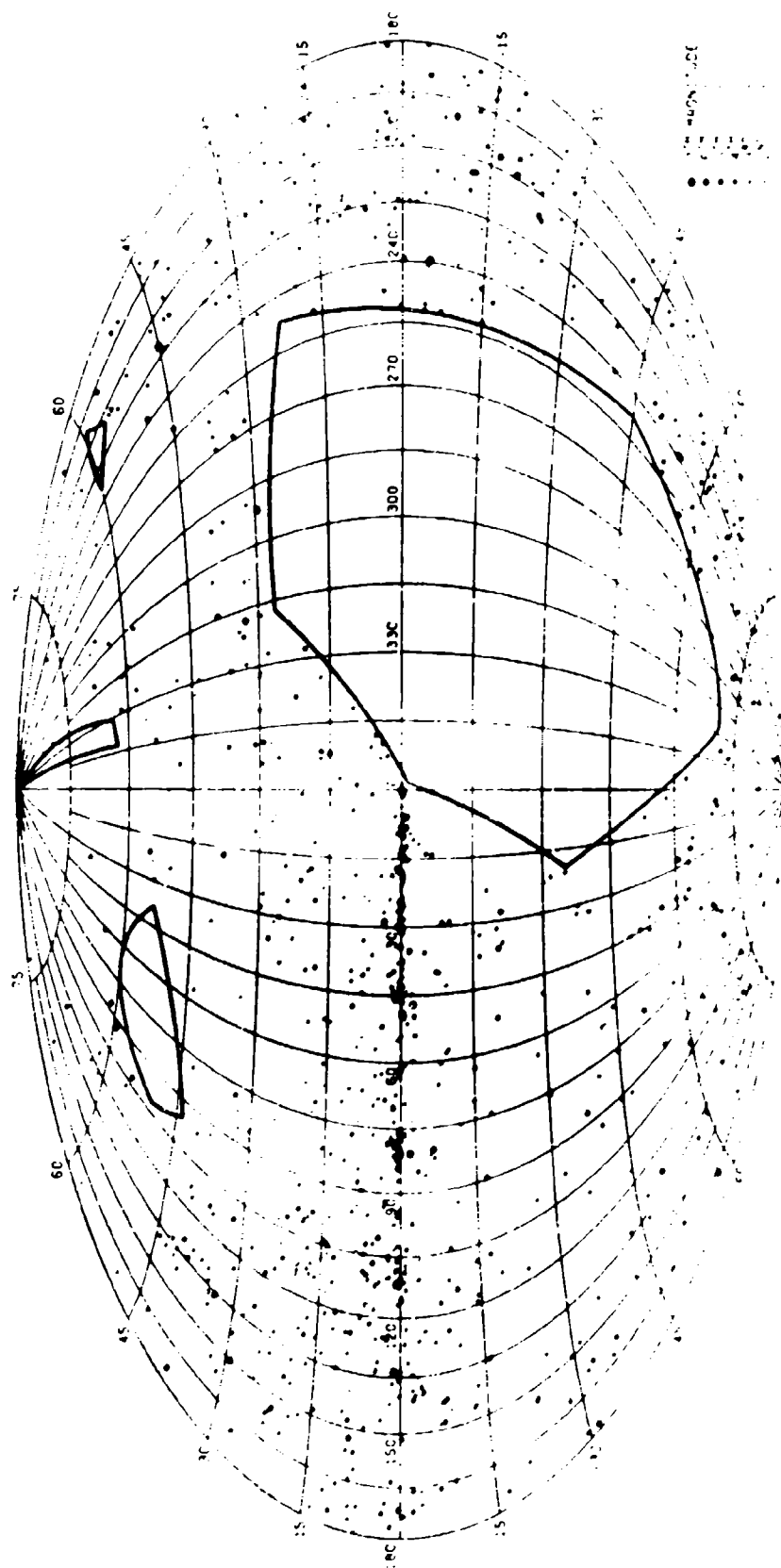


Figure 6. Distribution of 19.8 Micron Sources Plotted in New Galactic Coordinates

respectively. The heavy line in these figures defines the survey scan limits and the dotted line, about which many sources are concentrated, is the galactic plane. Figures 4, 5 and 6 present the same sources plotted in galactic coordinates.

For inclusion in the catalog, an observed source must satisfy stringent signal-to-noise criteria. In addition, any source scanned three or more times and observed only once was excluded regardless of its signal-to-noise ratio. Differences in channel-to-channel responsivity and variations in the system noise level during the observing period, combine to render the catalog incomplete at the faintest irradiance levels. Our analysis indicates that the catalog is statistically complete to  $M(4) = +1.1$   $M(11) = -1.2$  and  $M(20) = -3.2$  magnitudes. We emphasize that use of the catalog for statistical purposes at fainter magnitudes will lead to gross errors. It contains 2507 sources detected at 4.2 microns 1441 at 11 microns and 873 at 19.8 microns; 1344 out of the total 3198 sources were observed in more than one wavelength region and 279 were observed in all three spectral bands.

#### 4. THE CATALOG

The catalog is divided into three parts: Part I - Table of Observations; Part II - A list of individual measurements on Multiply Observed Sources; and Part III - Remarks.



## Part I - Table of Observations

### 1. COLUMN 1 - CATALOG NUMBER (CRL)

The sources are arranged in ascending order in right ascension. The CRL number is the catalog serial number assigned to the source.

### 2. COLUMN 2 AND 3 - COORDINATES (RA, DEC)

The measured right ascension and declination, precessed to epoch 1950, are given in these columns. The zenith encoder and stellar aspect sensor provide initial positions in rocket coordinates for sources detected on each flight. These positions were compared to IRC source positions (Neugebauer and Leighton<sup>1</sup>) and converted to rocket coordinates to obtain associations between the CRL and IRC sources. The IRC positions were then used to determine any offset or bias angles present in the azimuth and zenith position for each sensor scan. The derived offsets were applied to all the measured source positions which were then converted into celestial coordinates. These are the coordinates tabulated for singly observed sources. Sources in the multiply scanned regions which were detected on different rocket flights, were considered to be the same source if their error boxes overlapped. In this case, the tabulated position is an average of the individual position measurements.

---

Due to the large number of references cited on this and the following pages, the references will not be foot-noted. Refer to list of references on page 155.

### 3. COLUMN 4 AND 5 - RIGHT ASCENSION (EA) AND DECLINATION (ED) ERROR BOX

An estimate of the positional uncertainty in right ascension is given in column 4 to the nearest second of time, and similarly for declination to the nearest tenth of a minute of arc in column 5. Positional updating, as described above, results in aspect solutions with errors much smaller than the field-of-view of a single detector. Thus, the positional uncertainties are dominated by the effective resolution of the detector elements, which includes the effects of detector-to-detector overlap. The resolution half widths in the scan and cross scan directions were transformed from rocket to celestial coordinates and the results tabulated for singly observed sources. For multiply observed sources, the individual error boxes were combined in the root sum square sense and the resultant reduced by the square root of the number of observations prior to listing in the catalog.

Histograms of the angular difference, in minutes of arc, between CRL and IRC right ascensions and declinations are shown in Figures 7 and 8. The rms of the deviations are 1.5 arc minutes in right ascension and 1.25 arc minutes in declination. Thus, the average position in the catalog may be two or three times more accurate than the error box associated with it, justifying the number of significant figures retained in columns 2 and 3. The CRL positions are on the average 2.4 arc seconds east and 3.6 arc seconds north of the IRC positions. This is

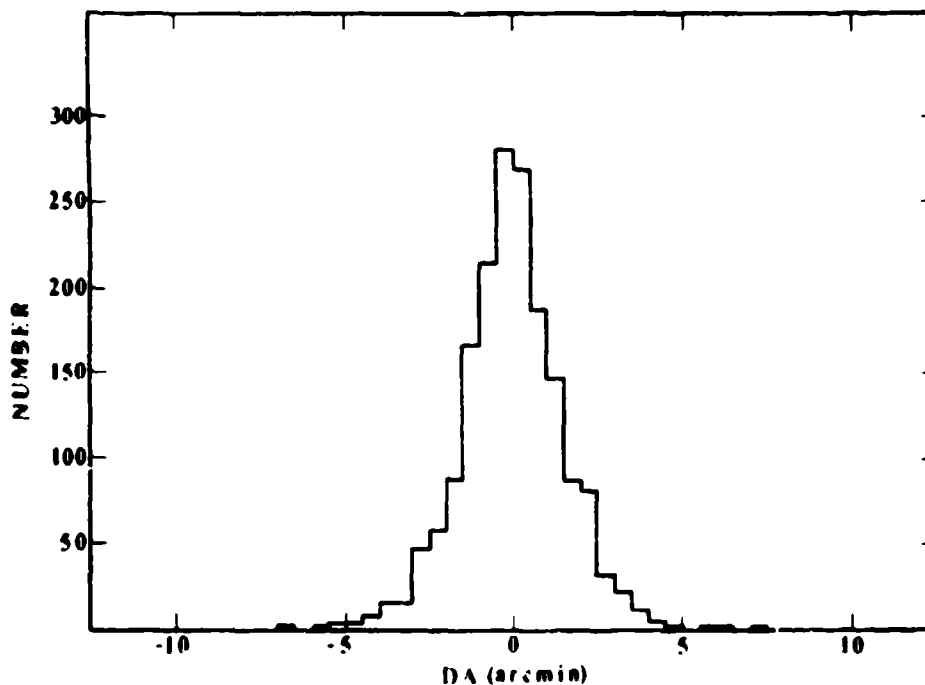


Figure 7. A Histogram for the Angular Difference in Right Ascension Found in the Survey and the IRC for all IRC Associated Objects. Differences are in terms of minutes of arc at the equator

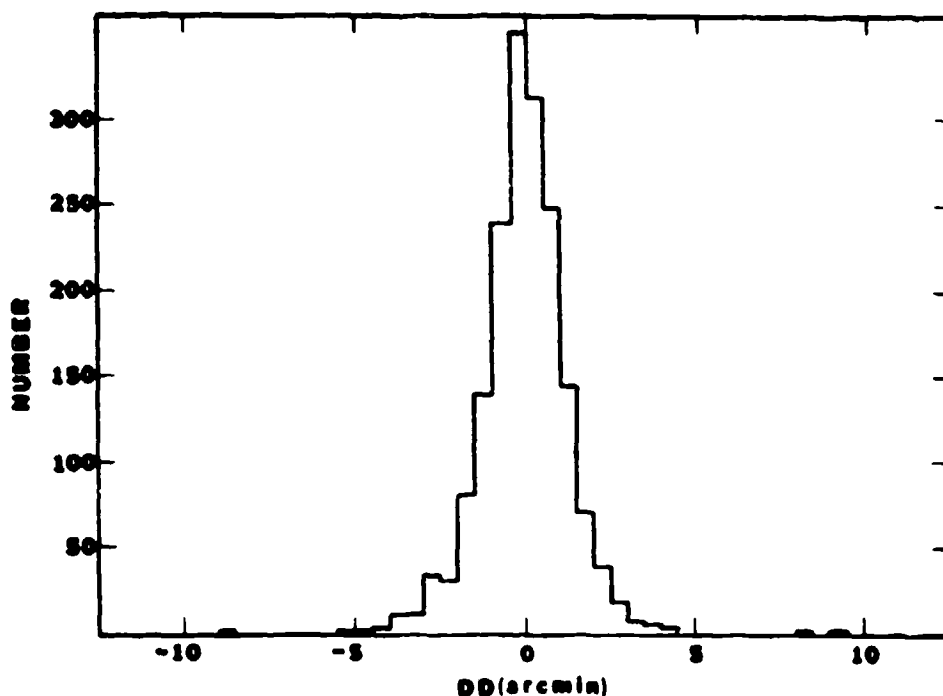


Figure 8. A Histogram for the Difference in Declination Found in the Survey and the IRC for all IRC Associated Objects

possibly due to errors in the adopted position of the zenith reference star used in the aspect solution.

#### 4. COLUMNS 6 TO 8 - MAGNITUDES M(4), M(11) AND M(20)

The magnitudes measured at 4.2, 11.0 and 19.8 microns are contained in these columns and are titled M(4), M(11) and M(20), respectively.

A blank entry in one of these columns indicates that the source was scanned but not detected in that spectral band. An asterisk (\*) means that the source was not scanned in that band. A "less than" designation (<) indicates that all measurements in this band were in saturation and the tabulated value is a lower limit. Magnitudes listed for multiply observed sources are the average of the individual measurements.

Each detector was individually calibrated for each rocket flight by a least squares fit of the observed system magnitudes to magnitudes derived from 2.2, 3.5, 11, and 20 micron ground-based photometry of IRC objects reported in the literature. Large amplitude infrared variables were discarded from this list of "standard stars" as were sources whose deviation from the best fit value was greater than  $3\sigma$ .

The latter was done for two reasons. First, the degree of variability of some sources was unknown, and secondly, the large instantaneous field-of-view used in the survey can accept flux from extended regions. Consequently, the survey instrument can measure objects located in or near nebulosity as having significantly more flux than conventional narrow beam ground-based observations. Magnitude correlations for the 4.2, 11.0 and 19.8 micron bands are shown in Figures 9, 10 and 11. A horizontal line connecting two values in these figures represents the range of values reported in the literature for this source. The rms deviation is about  $\pm 0.1$  magnitude.

The following relations may be used to convert the observed magnitudes to spectral irradiance at the effective wavelength of the spectral band:

$$H(4.2\mu) = 3.6 \times 10^{-15} - 0.4M(4) \text{ Watt cm}^{-2} \mu^{-1}$$

$$H(11.0\mu) = 8.6 \times 10^{-17} - 0.4M(11) \text{ Watt cm}^{-2} \mu^{-1}$$

$$H(19.8\mu) = 8.2 \times 10^{-18} - 0.4M(20) \text{ Watt cm}^{-2} \mu^{-1}$$

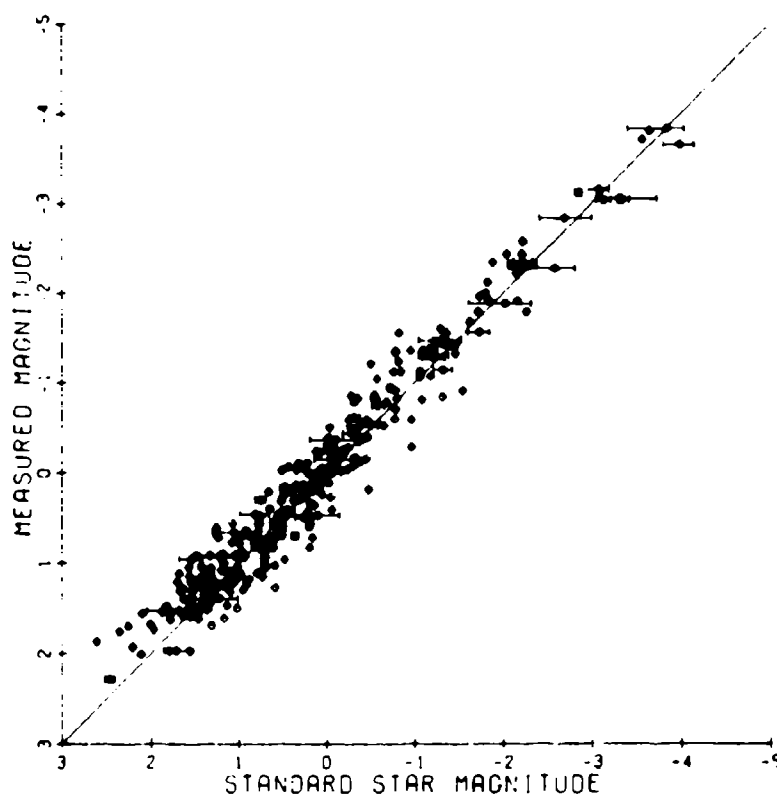


Figure 9. Correlation of Survey Magnitudes Measured at 4.2 microns With Those Derived From Ground Based Photometry of Associated IRC Objects

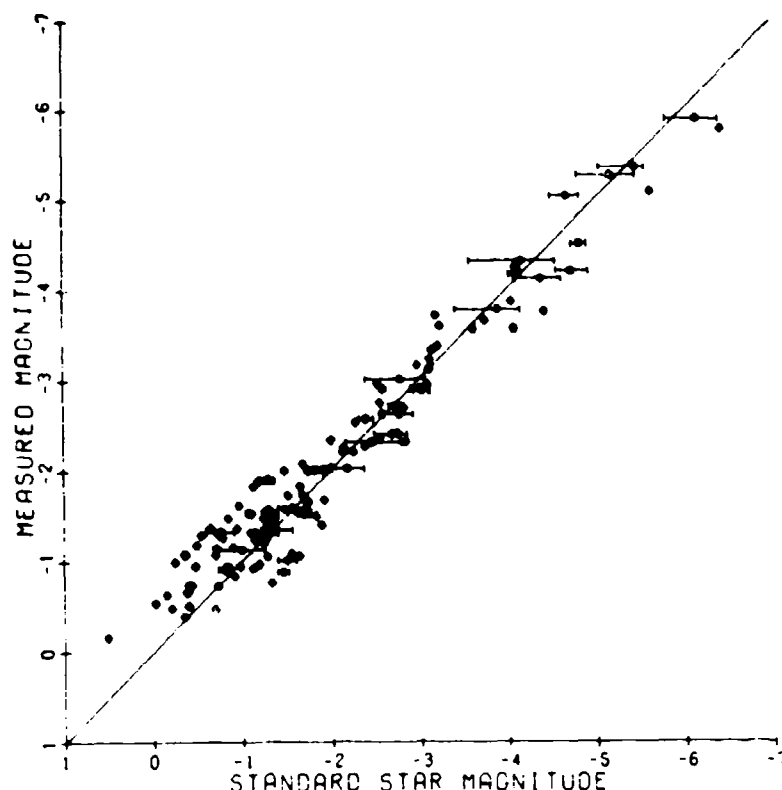


Figure 10. Correlation of  
Survey Magnitudes  
Measured at 11 Microns  
With Ground Based  
Photometry of Associated  
IRC Objects

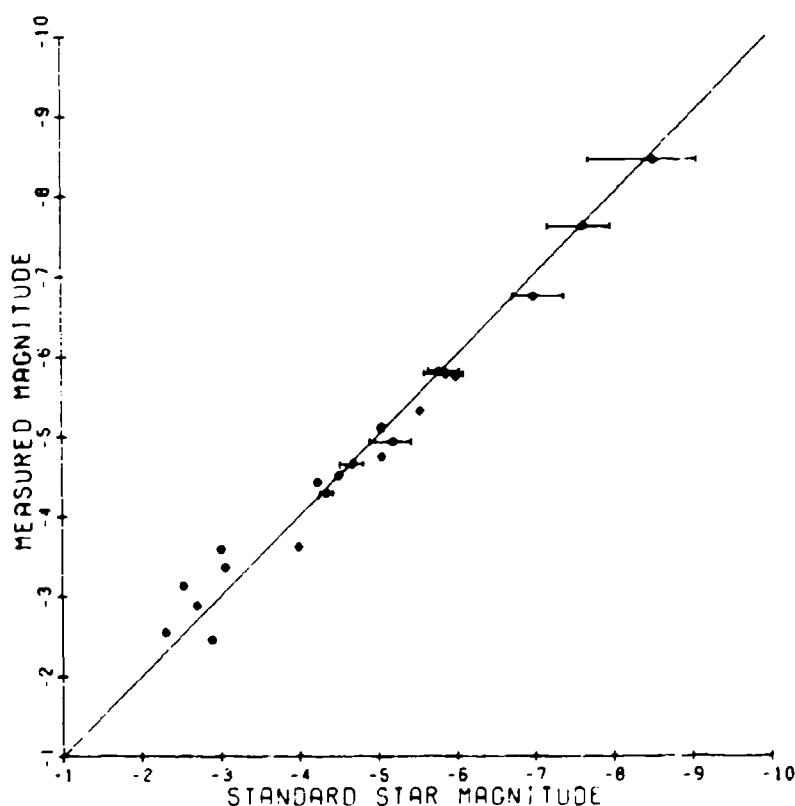


Figure 11. Correlation of  
Survey Magnitudes  
Measured at 19.8 Microns  
With Ground Based  
Photometry of Associated  
IRC Objects

## 5. COLUMNS 9 TO 11 - ASSOCIATIONS AND COMMENTS (IRC, BS, COMMENTS)

The IRC source, the Bright Star and/or other catalog designations, plus comments for celestial objects positionally associated with the CRL source are given in these columns. Primary associations were made in rocket coordinates if the CRL position was within a detector width and half height of a catalogued source. If more than one source fell within this box, the source closest to the CRL position was selected.

The IRC associations in column 9 are based on positions given by Neugebauer and Leighton<sup>1</sup> and from an extension of the 2.2 micron survey (designated by an E) of Neugebauer.<sup>2</sup> The Bright Star Number given in column 9, and the Bayer or Falmstead designations in column 10 are from Hoffleit.<sup>3</sup> Columns 9 and 10 contain only primary associations.

Associations in column 11 are based on a hierarchy of catalogues and are not inclusive; that is, an association in one catalog may be omitted in favor of an association in another. The hierarchy used and catalog designation and reference are ordered as follows:

<u>Order</u>	<u>Prefix Designation</u>	<u>Reference</u>
1.	Bayer or Falmstead	Hoffleit, D. <sup>3</sup>
2.	Variable Star	Kukarkin, B. V. et al <sup>4</sup>
3.	SVS (Suspected Variable)	Kukarkin, V. V. et al <sup>4</sup>
4.	CIT	Ulrich, B. T. et al <sup>5</sup>

The references in the next level were considered equally. Entry into the catalog was based on being closest to the CRL source.

<u>Order</u>	<u>Prefix Designation</u>	<u>Reference</u>
5.	N or NGC (Revised New General Catalog)	Sulentic, J. W. and Tifft, W. G. <sup>6</sup>
	I (Index Catalog)	Dreyer, J. L. E. <sup>7, 8</sup>
	SHARP	Sharpless, S. <sup>9</sup>
	RCW	Rodgers, A. W. et al <sup>10</sup>
	BRIGHT NEB	Lynds, B. T. <sup>11</sup>
	HFE	Hoffman, W. F. et al <sup>12</sup>
	W	Westerhout, G. <sup>13</sup>
6.	DO (Dearborne Observatory)	Lee, O. J. et al <sup>14, 15, 16</sup>

<u>Order</u>	<u>Prefix Designation</u>	<u>Reference</u>
7.	Case objective prism survey, designated by a reference number followed by a comma, then the star number in that ref.	(1) Nassau and Blanco <sup>17</sup> (2) Nassau and Blanco <sup>18</sup> (3) Nassau, Blanco and Morgan <sup>19</sup> (4) Nassau, Blanco and Cameron <sup>20</sup> (5) Blanco and Nassau <sup>21</sup> (6) Nassau and Blanco <sup>22</sup>
8.	MWC (Mount Wilson Catalog) Merrill and Burwell <sup>23, 24, 25</sup>	

If no primary associations were entered in column 11, secondary associations were made if the positions were within 1.5 times the errors listed in columns 4 and 5, or were judged appropriate for catalogues of special interest such as the 100 micron survey catalog of Hoffman et al.<sup>12</sup>

In column 11, MU and NU were used for the Greek letters  $\mu$  and  $\nu$ , which introduces a redundancy with a possible variable star designation. No variable stars with MU and NU prefixes were associated with CRL sources.

An EO comment means that this object was observed to have significant angular extent with respect to the subtent of a detector in one or more colors, a majority of the number of times it was observed. The EO designation does not necessarily apply to all spectral bands and all observations of a particular source. An R comment refers to additional remarks about this source contained in the Remarks section. An A comment signifies that the source has a CRL cross reference which is detailed in Appendix A.

#### 6. COLUMNS 12 AND 13 - GALACTIC COORDINATES (LII, BII)

The galactic longitude and latitude, in the  $l^{\text{II}}$  and  $b^{\text{II}}$  system, are given in these columns. The positions are listed to the nearest degree.

#### 7. COLUMN 14 - OBSERVATIONAL STATISTICS (N)

The first number in this column gives the number of times the source was observed and the second is the number of times the source could have been observed.

TABLE OF OBSERVATIONS

CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	RC	BS	COMMENTS	L	I	B	I	N
	H	M	S	O	S						R	C	O		
1	0 0 1	67 4.6	20	1.6						BRIGHT NEB	118	5			3-5
2	0 0 14	73 43.5	30	1.8	1.62		-3.20	70001		DO 44003	120	11			2-5
3	0 0 15	24 37.2	13	2.0			-3.36				109	-37			2-2
4	0 0 20	58 17.6	21	1.6	1.80						117	-4			2-3
5	0 0 42	55 25.1	17	1.3	.04		-1.38	60001		Y CAS	116	-7			3-3
6	0 0 52	-6 49.3	16	4.0	.80						92	-66			1-2
7	0 1 13	66 25.3	16	1.5	1.06				9099	DO 44038	118	4			3-4
8	0 1 55	39 49.7	14	1.7	1.43					SV AND	113	-22			2-2
9	0 2 0	41 50.5	12	1.4	1.22				9105	CO 44062	114	-20			2-2
10	0 3 15	-37 32.5	16	3.9	1.10						344	-76			1-2
11	0 3 25	-37 54.1	16	3.9	.48						342	-76			1-2
12	0 3 41	65 46.4	17	1.0	1.08					SVS 3	119	8			3-5
13	0 3 54	26 46.8	13	1.7	1.40					TT PEG	111	-35			2-2
14	0 1 16	42 43.2	15	1.6	.38		-2.60	40004		CIT 1	114	-19			2-2
15	0 4 23	-23 30.9	7	3.4			-2.83 3.68				52	-79			1-2
16	0 4 36	-11 10.3	9	2.7	1.65						98	-71			2-2
17	0 5 11	-25 45.6	8	2.5	1.30					SV SCL	40	-80			2-2
18	0 5 53	-17 51.9	8	2.7	1.45				18		75	-76			2-2
19	0 6 6	1 2.8	13	3.3	1.78		-4.57			EO	101	-60			1-2
20	0 6 15	33 35.2	14	1.8	1.56						113	-28			2-2
21	0 6 28	58 52.7	14	1.4	.92				21	BET CAS	118	-3			3-3
22	0 6 50	63 40.4	25	1.7	.91					DO 22804	118	1			2-3
23	0 7 37	-6 43.2	16	4.0	.74						96	-67			1-2
24	0 7 39	54 36.6	16	1.6	1.56					TT CAS	117	-8			3-3
25	0 7 42	38 9.1	20	2.3	1.98		-4.35				114	-24			1-2
26	0 7 46	33 23.0	19	2.5	1.58						113	-28			1-2
27	0 7 50	28 21.9	13	2.3	1.38						112	-35			2-2
28	0 8 7	31 58.1	11	1.6	.49					DO 8213	113	-30			2-2
29	0 8 24	-18 51.4	7	1.4	1.23					DO 8220	73	-77			2-2
30	0 9 7	27 57.3	17	3.1	1.67					SVS 12	112	-34			1-2
31	0 9 12	-6 17.0	15	4.1	1.15						97	-67			1-2
32	0 9 28	-24 53.4	8	3.7	1.20						47	-81			1-2
33	0 9 33	28 8.0	17	3.1	1.37						113	-34			1-2
34	0 10 5	24 52.5	18	2.9	1.39						112	-37			1-2
35	0 11 3	73 6.0	19	1.2	1.72		-2.15	70005			120	11			4-5
36	0 11 10	0 42.4	14	3.5	1.53		-3.60				104	-60			1-1
37	0 11 56	-8 3.8	7	2.1	.15				46	SVS 24	97	-69			3-3
38	0 12 2	-9 12.2	14	4.2	.27				48	7 CET	75	-78			1-2
39	0 12 45	60 57.3	23	1.7	.37					SHARP. 172	119	-1			2-3
40	0 12 51	-32 19.8	7	2.2	.49		-1.35			S SCL	359	-81			2-2



TABLE OF OBSERVATIONS

CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L 11	B 11	N
	H M S	O .	S								O	O	
41	0 14 3	49 11 5	13	1.4	1.50			50004		DO 23136	117	113	2 2
42	0 14 7	1 36 1	9	2 1	1.14			6		DO 59	105	60	1-1
43	0 14 18	9 59 0	15	3 4	1.35			10001		DO 60	109	52	1-1
44	0 14 32	33 20 9	19	2	.77						115	29	1-2
45	0 14 37	74 20 7	34	1 8	1.49			70007		DO 23047	121	12	2 5
46	0 15 2	33 30 8	19	2 7	.59						115	29	1-2
47	0 15 44	16 4 9	16	3 3	1.65						112	46	1-1
48	0 16 50	9 53 7	7	2 0	.78			-10006	74	OT CET	99	70	3 3
49	0 16 59	31 43 4	14	4 0				40006		VX AND	359	82	1-2
50	0 17 15	44 25 5	12	1 4	.15	-1.04					117	18	2 2
51	0 17 49	47 48 8	17	1 7	1.92					SVS 40	118	14	2-2
52	0 18 8	6 14 1	15	4 1	.98						102	68	1-2
53	0 19 15	20 19 7	8	2 7	-1.30	-1.82		-20007	85	T CET	78	60	2-2
54	0 19 47	53 14 9	22	1 6	1.60					FR CAS	119	9	1-2
55	0 19 49	58 55 3	17	1 6	1.66	-.64					119	3	2-3
56	0 20 13	38 27 0	14	1 7	1.31			40008		DO 8341	117	24	2-2
57	0 20 22	55 31 2	15	1 3	-1.68	-2.63		60009		T CAS	119	7	3-3
58	0 20 30	16 16 9	8	2 7	1.62			-20008			91	77	2-2
59	0 21 8	38 18 2	14	1 7	.85	-2.90		40109	90	R AND	117	24	2-2
60	0 22 11	69 52 1	11	1 8	1.19	-.70		70008		SVS 49	121	7	5-5
61	0 22 25	4 1 8	11	2 6		-3.00	-3.90				107	66	1-2
62	0 22 26	47 23 0	20	2 3	1.86						118	15	1-2
63	0 22 33	48 33 7	18	1 3		-.89					118	14	2-2
64	0 23 47	42 37 8	7	3 0	.23			-40004E	99	ALF PHE	320	74	2-2
65	0 23 56	4 40 8	16	4 1	.58						107	67	1-2
66	0 24 27	6 54 3	11	2 6	.28	-1.39		-10009		UY CET	106	69	2-2
67	0 24 30	69 21 4	15	1 1	.62	-2.14				A	121	7	5-5
68	0 24 50	35 19 1	13	2 1	1.00	-1.54		40010		AO AND	117	27	2-2
69	0 25 12	36 3 3	8	2 6		-1.57					342	82	2-2
70	0 25 25	33 17 3	8	2 1	-.20			-30006E					2-2
71	0 25 28	17 37 3	17	3 3	-.40	-.96	-2.46	20007	103	TV PSC	115	45	1-1
72	0 25 30	4 14 3	16	4 1	.80						108	66	1-2
73	0 26 7	48 8 9	17	1 8	.98		-2.88	50007		DO 23365	119	14	2-2
74	0 27 6	56 59 6	19	1 7	1.72					NS CAS	120	5	2-3
75	0 27 25	4 15 4	12	3 5	1.10			10	117	12 CET	110	66	1-2
76	0 27 38	82 18 2	113	4 5	1.27	-1.02				AO CEP	122	20	2-5
77	0 28 7	22 1 7	14	4 0		-1.35	-3.18				75	64	1-2
78	0 28 11	18 56 2	8	2 8							92	80	2-2
79	0 28 23	76 18 2	52	3 0	1.48		-2.81	80002		DO 23435	122	14	2-5
80	0 29 7	14 7 2	9	2 7	1.41						103	76	2-3

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	H M S	D O S	S										
81	0 29 21	45 48.4	13	2.1		-2.37	*				119	-17	1-2
82	0 29 39	25 45.6	17	3.1	.89			30012		TU AND	118	-37	1-1
83	0 32 29	-36 41.3	8	2.6		-3.04					323	-80	2-2
84	0 32 35	-10 59.8	11	2.7	1.96	-3.66				N 155	109	-73	2-3
85	0 32 58	-11 46.0	9	2.8		-1.41					109	-74	2-3
86	0 33 0	70 15.0	31	2.6	1.27	-1.00		70009		CP CAS	122	-8	3-5
87	0 33 31	-14 41.9	10	2.8	1.52						106	-77	2-3
88	0 33 57	48 40.4	18	1.9	1.01			50010		DO 23564	120	-14	2-3
89	0 34 4	44 12.2	15	1.7	1.22			40011	152		120	-18	2-3
90	0 34 28	53 26.1	18	2.1	1.70			50011		DO 23568	121	-9	2-3
91	0 35 25	68 19.0	12	1.7	1.03	.09	-4.00	70011		DO 23599	122	-6	3-8
92	0 36 12	59 24.7	14	1.4	1.45	-.58		60015		FZ CAS	121	-3	4-4
93	0 36 18	75 58.2	49	2.9		-1.10					122	-13	2-5
94	0 36 26	30 35.2	19	2.8	.27			30014	165	OCL AND	120	-32	1-1
95	0 36 28	49 -1.5	16	1.8	1.46			50013	164		121	-13	2-3
96	0 36 55	37 56.5	14	1.8	1.61			40012		DO 8439	120	-25	2-2
97	0 36 59	71 47.8	32	2.1		-1.41				SVS 74	122	-9	2-5
98	0 37 31	-18 11.0	14	4.1	.24						106	-80	1-2
99	0 37 32	59 12.7	16	1.5	1.72	-1.03		50016		DO 23637	122	-3	3-4
100	0 37 43	56 16.3	11	1.2	-.39	-.51		60017	168	ALF CAS	121	-6	4-4
101	0 37 49	36 55.7	19	2.5	1.63	-.66					121	-26	1-2
102	0 38 6	-17 55.5	14	4.1	.75						108	-80	1-2
103	0 38 7	-3 57.2	15	3.5		-1.98					116	-66	1-1
104	0 39 59	41 -1.5	15	1.6	1.80			40013		M 31	121	-22	2-3
105	0 40 9	-8 41.5	10	2.6	1.25	-.49	-2.44				116	-71	2-3
106	0 41 5	-8 17.3	8	2.3	-.54			-20010	188	BE1 CET	111	-81	2-2
107	0 42 30	68 55.6	13	1.1	.92	-1.55		70012			122	-6	5-6
108	0 43 56	15 12.5	10	2.4	-.03			20012	211	57 PSC	121	-47	1-1
109	0 44 54	32 25.3	13	1.8	1.20	-.50		30015		RW AND	122	-30	2-2
110	0 45 31	8 24.4	16	3.5	1.63						122	-54	1-1
111	0 46 11	7 19.1	16	3.2	.62			10007	224	OCL PSC	122	-55	1-1
112	0 48 13	57 31.5	17	2.0	1.55	-.80		60019	219	ETA CAS	123	-5	3-4
113	0 46 30	56 46.0	14	1.6	1.51			60021		DO 23796	123	-6	3-4
114	0 46 56	64 27.2	26	2.1	1.64	-.66				SHARP. 182	123	-2	2-4
115	0 47 25	-16 45.0	10	2.8	1.87	-2.99					121	-79	2-3
116	0 46 20	62 38.7	19	1.8	.96			60023		VY CAS	123	-0	3-4
117	0 48 26	61 32.9	19	1.5	1.11	-2.80	-3.02	60022	237	DO 23820	123	-1	3-4
118	0 49 4	-36 2.6	10	3.6							303	-81	1-2
119	0 49 7	56 17.0	19	1.9	1.61						123	-6	2-3
120	0 49 22	59 25.9	16	1.7	1.31			60024		DO 23844	123	-3	3-4

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	H	M	S	O	S						O	O		
121	0 49 54	69 41.3	16	1.6	1.51			70013		DO 23858	123	7		3-6
122	0 49 55	47 8.3	14	1.7	1.14	-.99		50016		RV CAS	123	-15		2-3
123	0 50 25	-1 25.6	9	2.3	.61			13	248	20 CET	124	-64		1-1
124	0 50 27	17 15.7	17	3.3	1.24						123	-45		1-1
125	0 50 48	52 23.3	19	2.0	1.58			50018	250		123	-10		2-3
126	0 50 57	6 33.9	16	3.7	1.45						124	-56		1-1
127	0 52 1	48 25.3	18	2.0	1.27			50020	256	DO 23892	124	-14		2-3
128	0 52 6	58 42.0	16	1.7	1.64			60027	253		123	-4		3-4
129	0 52 32	24 16.8	13	2.0	.83			20014	259	DO 8568	124	-38		2-2
130	0 52 46	-23 50.0	8	2.7		-.63				1 1600	137	-86		2-2
131	0 53 1	-7 34.6	10	2.7		-3.08		-10014	263		126	-70		2-2
132	0 53 27	57 43.6	17	1.7	1.52	-2.36		60029	260	DO 23903	124	-5		2-4
133	0 53 42	60 27.7	20	2.2	1.40			60031	264	GAM CAS	124	-2		3-4
134	0 53 54	48 26.2	14	1.4	.98			50021		KS CAS	124	-14		3-3
135	0 53 57	58 53.6	22	2.0	1.73			60030	265	UPS2 CAS	124	-4		2-4
136	0 54 25	23 9.3	12	2.0	1.76			20015	271	ETA AND	125	-39		2-2
137	0 54 32	58 9.2	11	1.2	.86	-.32	-2.32	60032		SVS 100076	124	-4		4-4
138	0 54 35	-31 6.8	10	3.8		-3.82					285	-86		1-2
139	0 56 58	32 38.9	19	2.6	1.35		-3.92				125	-30		1-2
140	0 57 0	-8 48.7	15	3.6							129	-71		1-2
141	0 57 42	56 21.2	18	1.8	.84		-3.83	60033		V365 CAS	124	-6		2-3
142	0 57 58	-42 6.5	12	3.8							296	-75		1-2
143	0 58 0	-1 57.0	15	3.4	1.07			14		DO 137	128	-64		1-1
144	0 58 40	29 39.9	17	2.6	1.48						125	-33		1-2
145	0 59 22	53 43.7	17	1.9	1.80	-1.08	-3.58				125	-9		2-3
146	0 59 33	61 34.1	19	1.8	1.48			60034		HO CAS	124	-1		2-4
147	1 0 6	52 52.5	19	2.1	1.17			50023		DO 23993	125	-10		2-3
148	1 0 32	-6 40.1	14	3.8		-2.05				N 355	131	-69		1-2
149	1 1 9	74 33.3	20	1.3	.39	-1.24		70016		DO 23987	124	12		5-6
150	1 1 52	28 33.2	9	1.7	1.89	-.62					125	-34		1-2
151	1 2 7	-7 3.1	10	2.7	1.17						132	-69		2-2
152	1 2 19	18 53.7	18	3.3	1.63			20017		DO 8641	127	-44		1-2
153	1 2 38	85 57.4	252	7.1	1.28					BRIGHT NEB	123	23		3-5
154	1 2 47	55 33.3	30	3.4	1.37			70017		DO 24036	124	3		2-5
155	1 2 48	19 58.9	17	3.4	1.47						127	-43		1-2
156	1 3 4	-32 .5	8	2.3	1.07	-3.32	-4.77	-30013		SVS 119	270	-84		2-2
157	1 3 41	12 19.1	9	1.9	-.44		-3.25	10011		CIT 3	129	-50		2-2
158	1 3 50	-20 49.0	7	2.2	1.34		-2.91				151	-83		3-3
159	1 5 3	-2 6.9	15	3.4	1.41					HS CAS	132	-64		1-1
160	1 5 21	63 18.2	28	2.6	1.52			60039			125	1		2-4

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	H M S	O ' "	S ' "								O				
161	1 6 5	-10 28.0	7 2.3		.42	-.79	-4.04	-10018	334	E/A CET	137	-73			3-3
162	1 6 26	-5 50.8	14 3.8		1.41						135	-68			1-2
163	1 6 51	65 52.5	24 2.9		1.22		-2.60	70018			125	3			3-5
164	1 6 52	35 21.5	10 1.9		-2.01	-2.34		40019	337	BET AND	127	-27			1-1
165	1 7 30	15 26.0	12 2.2		1.71		-2.69	20018	344	DO 8669	130	-47			2-2
166	1 7 48	10 33.4	11 2.3		1.49	-1.65					130	-52			2-2
167	1 8 3	53 28.6	14 1.5		.81	-1.33		50030		HV CAS	126	-9			3-3
168	1 8 20	30 22.4	17 2.4		1.30	-1.22		30021			128	-32			1-1
169	1 8 45	-13 47.2	7 2.0		1.22	-.81		-10019			143	-76			3-3
170	1 9 23	21 57.2	18 3.4		1.30					X PSC	129	-40			1-2
171	1 9 27	-43 50.9	11 4.2				-4.62				290	-73			1-1
172	1 9 40	-3 40.9	15 3.5		1.93						136	-66			1-1
173	1 9 46	-37 58.7	12 3.6				-4.43				282	-79			1-2
174	1 9 52	-1 9.1	15 3.6		1.61						135	-63			1-1
175	1 9 53	67 31.5	25 2.1		1.42			70019		DO 24136	125	5			2-6
176	1 9 54	-32 16.4	8 2.8			-1.70				N 427	261	-83			2-2
177	1 10 24	62 42.0	19 1.8		.01	-1.38		60041		DO 24139	125	0			3-4
178	1 10 51	13 3.2	17 3.7		1.99						131	-49			1-2
179	1 10 53	26 53.0	17 2.1		1.32			30023		RT PSC	129	-35			1-1
180	1 11 5	-43 9.4	10 2.0		1.19	-3.27	-2.95				289	-74			1-2
181	1 11 21	35 3.0	20 1.8				-4.08				125	3			2-5
182	1 11 42	-2 26.5	15 3.7		.72			17		NO 178	136	-64			1-1
183	1 11 46	58 59.0	17 1.8				-3.29			HX CAS	126	-3			2-4
184	1 11 49	66 23.6	15 1.3		1.26	-.40		70020		DO 24265	125	4			5-5
185	1 12 21	78 58.1	64 2.9			-1.43				EO	124	16			2-6
186	1 12 27	71 27.6	22 1.9		1.03	-1.84	-4.27	70021		DO 24161	125	9			5-6
187	1 12 48	48 59.2	23 2.8		.78						127	-13			1-2
188	1 13 18	25 30.7	16 2.9		.31			30025		Z PSC	130	-37			1-1
189	1 14 16	59 2.6	16 1.4		1.37		-1.47	60042		BO CAS	126	-3			2-4
190	1 14 26	66 57.2	14 1.3			-1.81	-3.32				125	4			5-5
191	1 14 35	-36 5.1	12 3.6				-2.63				273	-80			1-2
192	1 14 51	13 38.8	16 2.9		1.09			10013		DO 187	132	-48			1-2
193	1 15 1	57 32.7	19 1.3		.10			60043		DO 24198	126	-5			2-3
194	1 15 53	72 22.0	18 1.2		-.06	-2.50	-2.96	70024		S CAS	125	10			5-6
195	1 16 5	35 29.9	18 2.8		1.69						129	-27			1-1
196	1 16 10	-27 33.8	13 4.2		1.30		-2.85				216	-84			1-2
197	1 16 23	56 3.6	13 1.5		1.23	-2.10	-2.88	60044		AA CAS	127	-6			3-3
198	1 16 37	1 16.3	16 3.7		1.72						137	-61			1-1
199	1 17 3	49 34.2	13 2.1			-1.36					128	-13			1-2
200	1 17 14	63 43.7	25 2.2		1.39			60047		DO 24231	126	1			2-5

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	H	M	S												
		O													
201	1 18 22	18 54.9	18	3.4	1.48						133	-43			1-2
202	1 18 41	76 37.2	68	4.3	1.57						125	14			2-6
203	1 18 48	66 32.6	23	2.3	1.45			70026		5.32	126	4			2-5
204	1 19 4	-1 10.7	16	3.8	1.66						140	-63			1-1
205	1 19 40	61 35.6	14	1.3	2.31	-1.38	-3.19			SHARP. 187	R	127	-1		4-4
206	1 19 42	1 52.0	11	2.4							138	-60			2-2
207	1 20 6	74 39.6	25	2.1							125	12			2-6
208	1 20 48	-9 .7	14	3.7	1.65						147	-70			1-2
209	1 21 13	-31 14.4	8	2.8	1.52			-30014	400		244	-82			2-2
210	1 21 36	-8 26.8	10	2.7	.89			-10021	402	THET CET	147	-70			2-2
211	1 21 38	60 48.9	16	1.7	1.17	-1.84		60048		BT CAS	127	-2			4-4
212	1 21 40	19 1.1	16	2.5		-1.02	-2.67				134	-43			1-1
213	1 22 16	67 51.5	19	1.7	1.44	-1.86		70027	399	PSI CAS	126	5			3-6
214	1 24 27	16 40.5	14	2.9	1.63						135	-45			1-2
215	1 24 38	-32 49.7	8	2.9	-1.83	-1.91		-30015	423	R SCL	250	-81			2-2
216	1 25 5	16 25.9	11	2.4	1.51			20025		ST PSC	135	-45			2-2
217	1 25 28	4 5.2	8	2.1		-1.55	-3.87				140	-57			1-2
218	1 25 7	-43 36.3	10	4.2	-1.74	-1.25		-40010E	429	GAM PHE	281	-72			1-1
219	1 26 10	60 47.6	19	2.4	1.79			50036		BU CAS	128	-1			2-4
220	1 26 10	51 24.6	12	1.9			-2.93			DO 24371	129	-11			1-2
221	1 26 15	79 26.4	26	1.2	1.63	-.52	-2.99	80003		DO 24400	125	17			4-6
222	1 26 37	35 40.1	17	2.7	1.72						132	-26			1-1
223	1 26 57	11 38.7	11	2.4							138	-50			2-2
224	1 27 38	5 53.3	9	2.1	1.16			10017	434	NU PSC	140	-55			2-2
225	1 27 44	15 25.0	17	3.7	1.72						137	-46			1-2
226	1 28 11	2 37.9	10	2.6	1.23	-.73		19		R PSC	142	-59			2-2
227	1 28 30	62 4.4	16	1.5	1.32			60053		IM CAS	128	-0			3-4
228	1 28 44	15 3.2	16	2.9	1.03		-2.95	20026	437	ETA PSC	137	-46			1-2
229	1 29 6	77 39.7	17	1.4	1.50						125	15			2-6
230	1 30 40	62 10.9	17	1.7	1.61	-1.65	-2.96			DO 24582	128	-0			3-4
231	1 31 17	65 32.1	22	2.3	1.09			70029		DO 24475	127	3			3-5
232	1 31 49	15 6.0	16	2.7	1.59						138	-46			1-1
233	1 32 22	23 21.1	17	2.5		-1.06					136	-38			1-1
234	1 33 17	-13 .3	8	2.3	1.91	-1.92					161	-72			3-3
235	1 34 6	-37 32.5	8	2.6		-1.28	-2.73			N 633	263	-76			2-2
236	1 34 7	7 35.1	11	2.4	1.44					SVS 100126	142	-53			2-2
237	1 34 43	48 22.0	22	1.9	.43			10019	464	.51 AND	131	-14			1-2
238	1 34 56	60 12.1	25	2.7		-1.17		50041			129	-2			2-4
239	1 35 21	8 25.3	16	3.0	1.45						142	-52			1-2
240	1 35 30	65 15.7	32	3.8	1.37	-.70		70030		DO 24571	128	3			2-5

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	H M S	O ' S									O	O	
241	1 37 0	8 40.7	17	3.9	1.63						143	-52	1-2
242	1 37 29	55 47.4	26	2.2	1.47						130	-6	1-2
243	1 38 51	5 15.6	16	3.9	.91			10020	489	NU PSC	145	-55	1-2
244	1 39 47	10 1.4	11	2.5		-1.37					143	-51	2-2
245	1 39 58	28 18.0	16	2.7	1.63						136	-33	1-1
246	1 41 9	60 27.5	19	2.4	.	-1.27				N 659	129	-1	2-3
247	1 43 59	10 8.1	11	2.5	1.97			10022		DO 294	144	-50	2-2
248	1 44 14	64 17.5	26	3.0	1.04	-.77				DO 24787	129	2	2-5
249	1 44 38	-31 27.5	8	2.7	.	-1.39					235	-77	2-2
250	1 46 5	29 34.7	17	2.4	.	-1.57					138	-31	1-1
251	1 47 19	64 37.1	23	1.3	1.23	-1.43				DO 24852	129	3	2-5
252	1 47 25	-5 6.4	11	2.5	1.30					SVS 169	158	-64	2-3
253	1 47 30	53 28.0	17	2.0	.42	-1.19				TT PER	132	-8	2-2
254	1 47 49	-13 6.9	8	2.7	1.29						170	-70	2-3
255	1 48 59	-10 36.1	8	2.3	.88				539	ZET CET	166	-68	3-3
256	1 49 4	-6 41.9	10	2.6			-3.39				160	-65	2-3
257	1 49 4	38 53.9	18	1.8	1.42					DO 8951	136	-22	1-1
258	1 50 29	54 1.2	17	2.0	1.80	-.99				DO 24942	132	-8	2-2
259	1 50 34	59 55.3	21	1.6	1.22					SVS 100140	131	-2	2-3
260	1 51 26	6 46.6	16	4.0	1.26						149	-53	1-2
261	1 51 40	-46 32.1	11	4.5	-.50				555	PSI PHE	274	-67	1-1
262	1 51 47	8 30.7	11	2.5	1.33	-.75				SVS 100145	148	-51	2-2
263	1 52 10	-31 52.4	9	3.8		-1.36					235	-76	1-2
264	1 52 17	6 58.6	16	4.0	1.33		-3.42				149	-52	1-2
265	1 52 20	69 58.2	16	1.5	1.09					V391 CAS	128	8	4-6
266	1 52 22	24 50.9	17	2.4			-2.87				141	-36	1-1
267	1 52 29	7 42.6	17	4.0	1.53						149	-52	1-2
268	1 52 54	-32 28.3	9	4.0	.52						237	-75	1-2
269	1 52 59	43 32.4	19	1.8	1.19						135	-18	1-1
270	1 53 3	59 2.2	19	1.5	1.69					X CAS	131	-3	2-2
271	1 53 6	-31 55.3	8	1.8	.51						235	-75	1-2
272	1 54 20	-22 46.7	7	2.2	1.43		-3.66			56 CET	199	-75	3-3
273	1 54 39	89 .5	586	2.4	.53				565	ALF UMI	123	26	6-6
274	1 54 49	27 33.8	8	1.8	1.17				424	DO 8991	140	-33	1-1
275	1 55 13	5 47.1	11	2.6		-1.10			564		151	-53	1-2
276	1 55 14	30 53.7	8	1.8	-.08					DO 8992	139	-30	1-1
277	1 55 17	-48 45.3	13	4.7	.53						276	-65	1-1
278	1 55 31	-45 11.7	19	2.1	-1.46	-2.68	-3.89			DO 2510E	135	-16	1-1
279	1 55 56	-7 19.1	8	2.2	1.62						164	-64	2-3
280	1 56 7	54 34.8	17	1.6	.32	-1.50				U PER	133	-7	2-2

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	H M S	O ' S									O	O	
281	1 56 29	60 3.7	14 2.2		2.03	-.96	-2.54			SVS 100154	131	-1	3-4
282	1 56 29	75 41.8	43 3.2		1.68			80004		SVS 100153	127	14	3-6
283	1 57 5	-14 7.9	7 2.2		1.57	-1.21		-10029			177	-69	3-4
284	1 57 24	-21 3.1	6 1.9		.86	-.46		-20023	583	57 CET	195	-73	3-3
285	1 57 28	63 53.4	16 1.5		1.46	-.93		60071		SVS 5955	130	2	4-5
286	1 57 37	-21 19.2	6 2.2		-.17	-.87		-20024	585	UPS CET	195	-73	2-3
287	1 57 58	-8 47.4	7 1.7		-.61	-1.13		-10030	587	SVS 187	167	-65	3-3
288	1 58 19	71 1.2	32 3.4		1.94			70033		V393 CAS	129	9	2-6
289	1 58 26	61 41.1	14 1.6		1.66			60072		DO 25165	131	0	3-4
290	1 59 48	13 14.9	16 2.9		.83			10024	601	DO 355	148	-46	1-1
291	1 59 53	64 27.1	26 2.5			-1.32					131	3	2-5
292	2 0 17	7 27.9	16 2.9		-.22	-1.47		10025		1 1772	152	-51	1-1
293	2 0 20	-45 36.2	11 4.4			-1.99					270	-67	1-1
294	2 0 45	42 5.8	20 2.1			-1.09		40034	603	GAM1 AND	137	-19	1-1
295	2 1 6	-4 21.0	11 2.6		1.21			29	611		163	-61	2-3
296	2 2 35	-37 32.1	9 2.6			-.97	-3.70				251	-72	2-2
297	2 3 40	-10 27.3	8 2.3		.67	-1.24		-10032		UZ CET	173	-66	3-3
298	2 4 58	59 1.0	19 1.6		1.61	-.87		60073		1.135	133	-2	2-3
299	2 5 23	51 33.4	20 1.9		.48			50054		DO 25330	135	-9	1-1
300	2 6 6	-38 57.5	8 3.6				-2.99				254	-70	1-2
301	2 6 22	-18 1.9	11 2.6		1.22			-20027	625		189	-70	2-4
302	2 6 46	16 32.7	16 3.1				-2.72				149	-42	1-1
303	2 7 56	19 16.9	16 2.9		.64			20041	631	15 ARI	147	-40	1-1
304	2 8 12	22 14.7	16 2.7		1.36						146	-37	1-1
305	2 8 42	63 56.1	13 1.3		1.06			60075		DO 25383	132	3	5-5
306	2 9 32	65 21.3	32 3.8				-2.73			SVS 198	131	4	2-5
307	2 10 48	-33 48.2	14 3.6		-1.47	-1.61					238	-71	1-2
308	2 12 49	5 37.2	16 4.0				-3.89				158	-51	1-2
309	2 13 20	67 29.9	21 1.8			-1.65					131	6	2-6
310	2 14 19	44 4.3	18 1.7		-.76	-1.76		40037		W AND	139	-16	1-1
311	2 14 24	78 31.8	29 1.7		1.07	-.59					127	17	4-6
312	2 14 36	-14 54.6	9 2.9			-1.01		80005		AG CEP	185	-67	2-4
313	2 15 30	57 11.9	15 2.0		1.40			60078		BU PER	135	-3	1-2
314	2 15 46	-14 22.7	7 2.3		1.19			-10033			185	-66	3-4
315	2 16 17	63 55.8	22 1.9		1.43			60080		DO 25546	132	3	2-4
316	2 16 29	33 36.9	8 1.8			-.64	-3.25				143	-26	1-1
317	2 16 37	24 12.3	17 2.4		1.45						147	-34	1-1
318	2 16 52	-3 12.0	10 2.3		<-3.82	-5.09		30	681	OMI CET	168	-58	3-3
319	2 18 3	60 41.6	22 2.7		1.32		-2.66	60084		DE CAS	134	-0	2-4
320	2 18 43	56 52.0	14 1.6		.78	-1.18		60087		RS PER	135	-4	3-3

COMMENTS	L	I	B	I	N
69 CET	165	-55			3-3
SU FOR	247	-69			1-29
S PER	135	-2			3-3
0 25605	130	9			2-6
	131	8			2-6
N 696	EO R	134	1		4-4
0 25684		135	-3		2-3
W 3	R	134	1		4-4
	EO	266	-63		1-1
SZ CAS	R	135	-1		2-4
		134	1		2-4
		134	-0		2-4
W 4	EO	134	1		2-4
		148	-31		1-1
RR PER		138	-9		1-1
	EO	267	-62		1-1
R FOR		216	-68		3-3
		203	-67		2-2
		207	-67		3-3
		129	15		4-4
I 0236		136	-2		2-2
		156	-42		1-1
		217	-68		2-2
		169	-54		2-2
		129	15		3-3
UX AND		194	-64		3-3
U CET		141	-14		1-1
CIT 4		188	-62		2-2
EE PER		134	4		4-4
		138	-6		1-1
15 TRI		146	-23		1-1
		255	-64		1-1
	EO	251	-65		1-1
80 CET		180	-59		3-3
R TRI		147	-24		1-1
		150	-30		1-1
		219	-66		4-4
N 1018		193	-59		2-2
GP CAS		136	-0		2-2
RR CEP		127	19		3-3



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	H M S	O	S								O	O	
361	2 36 17	60 12.3	17	2.3		-1.87	-3.08				136	0	2-4
362	2 36 30	55 45.3	33	4.2	1.35						138	-4	1-2
363	2 36 41	6 8.3	16	3.9			-3.49			EI PER	165	-48	1-2
364	2 36 46	55 41.0	20	3.0			-3.67			DO 9448	138	-4	1-2
365	2 36 55	39 37.3	18	2.2	.90			40047			145	-18	1-1
366	2 36 59	-32 6.0	10	2.6	1.13		-4.64			EO	231	-66	2-3
367	2 38 6	30 59.0	16	2.1	.98			30046		Y ARI	149	-26	1-1
368	2 38 16	62 3.3	14	1.5	1.66	-.78					135	2	3-4
369	2 39 56	-5 46.6	10	2.8	1.94					N 1063	179	-56	2-3
370	2 40 2	-23 50.7	9	2.6	1.53						211	-65	2-4
371	2 40 47	36 2.4	16	2.1		-1.42		40049		TV PER	147	-21	1-1
372	2 42 17	-29 27.5	7	2.3	1.34			-30025		ST FOR	224	-65	3-3
373	2 42 40	62 48.5	18	1.8	.69	-.62		60095		CO CAS	136	3	3-4
374	2 43 51	-28 16.2	10	2.9		-1.04	-3.17				222	-65	2-4
375	2 43 58	54 40.5	29	3.5			-3.84				139	-4	1-2
376	2 44 39	17 42.2	17	3.4		-3.39					158	-37	1-2
377	2 45 3	29 3.4	16	2.3	1.69			30050	824	39 ARI	151	-27	1-1
378	2 45 30	-12 39.2	6	1.6	.14	-.94		-10040	832	Z ERI	190	-59	4-4
379	2 45 35	17 17.9	10	2.0	-.33	-1.19	-3.27	20049		T ARI	159	-37	2-2
380	2 46 9	60 51.0	12	1.5	.98		-3.49	60096		3.29	137	1	3-4
381	2 46 36	56 46.0	13	1.3	.72	-1.20	-3.13	60097		W PER	139	-2	2-2
382	2 46 58	55 41.0	16	2.3	-.21			60099	834	ETA PER	139	-3	1-2
383	2 47 12	-45 3.6	10	4.3	.84						258	-61	1-1
384	2 47 18	57 39.5	23	2.7	1.46			60100		SVS 6000	138	-1	2-2
385	2 48 30	34 51.0	17	2.2	.42			30051	843	17 PER	149	-22	1-1
386	2 48 44	53 48.1	14	1.3	.88	-.61		50076			140	-5	2-2
387	2 48 57	54 40.7	19	2.1			-3.02				140	-4	2-2
388	2 49 4	47 16.8	16	1.6	1.48						143	-11	1-2
389	2 49 14	14 12.8	12	2.3		-.96					162	-39	2-2
390	2 49 20	79 35.1	49	2.9		-.64	-2.68			EO	128	18	2-6
391	2 49 48	27 43.2	16	2.5	1.46						153	-28	1-1
392	2 49 49	-8 28.3	7	1.9	.04					RR ERI	185	-56	3-3
393	2 50 16	74 7.4	16	1.1	1.45	-.93		-10041		DO 26303	131	13	6-6
394	2 50 26	49 57.9	28	3.7	1.33		-3.96	70039			142	-8	1-2
395	2 50 59	-28 49.0	10	2.7	1.85						223	-63	2-4
396	2 51 9	9 7.2	11	2.5	.01			10033		DO 487	166	-43	2-2
397	2 51 18	21 34.3	17	3.2			-3.55				157	-33	1-2
398	2 51 26	73 .2	26	2.1	1.45	-1.09					132	13	2-6
399	2 53 4	50 27.8	19	2.4		-1.49					142	-7	2-2
400	2 53 6	54 27.0	19	2.1	.19	-.37		50080		ER PER	140	-4	2-2

[illegible]

	H	M	S	O	'	S	"	-1.46	-1.24	-2.78	20051	867	RZ ARI	O
401	2	53	8	16	7.5	12	2.1	-1.46	-1.24	-2.78	20051	867	RZ ARI	160 -35
402	2	53	32	55	41.7	28	3.3							140 -3
403	2	53	56	-9	5.8	8	2.2	.92			-10043	874	ETA ERI	127 -55
404	2	54	8	14	25.1	16	3.1	.73			10034		DO 9638	163 -38
405	2	54	22	4	19.5	11	2.6	.71			36	877	DO 492	171 -46
406	2	55	8	62	56.3	19	2.2	1.59			60107		DO 26463	137 4
407	2	55	39	50	14.3	28	3.6			-4.04				R 143 -7
408	2	56	38	43	42.5	14	1.6	.	-1.55	-2.71			IU PER	146 -13
409	2	56	52	41	19.3	21	3.0	.79			40052		AE PER	147 -15
410	2	57	11	43	58.3	20	2.3							R 146 -13
411	2	57	44	78	17.1	29	1.2		-1.28	-3.84				130 17
412	2	58	13	13	46.7	16	3.2	1.60						164 -38
413	2	58	17	-3	3.6	11	2.6	1.17			37	904	7 ERI	180 -51
414	2	58	34	21	36.3	10	2.5	.88		-2.97	20052			159 -32
415	2	59	20	-16	33.0	8	2.9	.84	-.49					200 -58
416	2	59	20	60	19.3	19	2.4		-.34				SHARP. 201	138 2
417	2	59	33	16	25.2	16	3.1			-3.09				163 -36
418	2	59	37	79	12.8	29	1.6	.87			80007	881	DO 26502	129 18
419	2	59	43	3	53.1	11	2.6	-1.97	-2.01	-4.06	38	911	ALF CET	173 -46
420	2	59	51	-27	29.7	10	2.9							221 -61
421	3	0	6	-22	58.4	10	2.7			-2.62			N 1187	212 -60
422	3	0	10	43	41.4	20	2.3	1.66	-1.31	-3.33				147 -13
423	3	0	13	-9	16.5	10	2.7	.99					N 1185	129 -54
424	3	0	37	38	44.5	18	1.9	.81						149 -17
425	3	1	14	53	12.3	14	1.3	.75			50084	915	GAM PER	142 -4
426	3	1	34	31	18.3	9	2.3			-3.45				154 -23
427	3	1	47	38	19.8	19	2.2	.70						150 -17
428	3	1	55	38	38.8	10	1.4	-2.44	-2.53		40054	921	RHO PER	150 -17
429	3	1	57	55	34.5	32	3.9			-3.55				141 -2
430	3	2	1	-31	38.0	8	2.2		-3.00	-4.04				229 -61
431	3	2	7	-10	21.5	8	2.9		-2.13					191 -54
432	3	2	27	75	33.5	22	1.4	1.05			80008		DO 26603	131 15
433	3	2	46	-33	25.9	10	3.4			-4.13				233 -61
434	3	3	1	55	33.6	21	2.6	.44	-2.09	-3.35	60110		IO PER	141 -2
435	3	3	30	-26	25.0	9	2.4	1.59		-2.63			RV FOR	219 -60
436	3	3	57	31	12.8	18	2.5			-3.71				154 -23
437	3	3	58	58	16.7	24	2.4		-.22	-2.78				140 0
438	3	3	59	38	45.6	19	2.2	1.27	-1.24					150 -17
439	3	4	3	-6	16.9	7	2.0	.21			-10045	935		129 -52
440	3	4	4	58	50.2	14	1.6	1.17			60112		DO 26691	140 1

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	H M S	O ' S									O	O	
441	3 4 9	-47 3.5	11	4.5	-26						259	-57	1-1
442	3 4 44	47 51.3	26	3.3		-2.84	-2.34				145	-9	1-2
443	3 5 0	40 46.4	15	1.9	1.62		-2.14	40055	936	BET PER YY CAS	149	-15	2-2
444	3 5 22	65 35.3	21	2.3	1.32						136	7	2-5
445	3 5 35	-24 13.5	8	2.7	1.50						215	-59	2-4
446	3 5 48	-24 39.2	11	2.7		-1.19				RW FOR	216	-59	2-4
447	3 6 0	-47 44.2	11	4.6	-1.03	-1.76					260	-57	1-1
448	3 6 3	-41 10.4	13	4.1		-74	-4.47			EO	248	-59	1-1
449	3 6 22	44 40.1	12	1.4	1.02			40057	941	KAP PER N 1222	147	-11	2-2
450	3 6 38	-3 7.1	8	2.6	1.83		-2.49				193	-49	2-3
451	3 6 44	-47 5.7	11	4.5	.03		-3.71			EO	259	-57	1-1
452	3 7 38	-47 39.8	11	4.6	.25		-4.68			EO	259	-56	1-1
453	3 7 38	57 42.5	14	1.7	.22	-.75		60113		DO 26767	141	-0	3-3
454	3 8 5	-47 56.8	12	4.6			-4.45				260	-56	1-1
455	3 8 24	14 35.8	17	3.3	.45	-.44		10040		U ARI	166	-36	1-1
456	3 8 38	-43 51.7	10	4.2	1.13						253	-58	1-1
457	3 8 50	74 3.2	19	1.1	1.23		-2.72	70040		DO 26751	132	14	4-6
458	3 8 56	-33 43.8	8	2.6			-4.01				234	-59	2-3
459	3 9 13	23 31.9	18	3.0	1.23						160	-29	1-1
460	3 9 45	65 23.8	2	2.9	1.49			70041		DO 26795	137	7	2-5
461	3 9 54	6 29.2	16	3.6	1.44			10041	958		173	-42	1-2
462	3 10 35	47 6.6	19	1.9	1.60						147	-9	1-2
463	3 11 22	-44 35.6	10	4.3	1.24						254	-57	1-1
464	3 11 59	46 23.9	10	1.3	.59	-1.07		50090		AA PER DO 531	147	-9	2-2
465	3 12 16	-2 31.8	16	3.6	1.51			41			193	-48	1-2
466	3 12 19	64 33.5	16	1.6	1.15	-.20		60116		DO 26859	138	6	3-4
467	3 12 33	45 10.2	10	1.4	1.26			50092	973		148	-10	2-2
468	3 12 50	-25 44.3	11	2.5			-3.79				218	-58	2-4
469	3 13 6	-23 47.4	11	2.6	1.40		-3.06				215	-57	2-4
470	3 13 54	-8 45.8	10	2.8	1.52		-3.24				191	-51	2-4
471	3 14 49	32 45.5	19	2.5	.67			30050		DO 9849	155	-21	1-1
472	3 14 54	81 58.5	79	3.8	1.67					DO 26771	128	21	3-6
473	3 16 56	70 33.5	19	1.9	1.89		-3.40			SVS 284	135	11	4-6
474	3 17 15	31 49.4	18	2.6	.62	-.74		30061		UZ PER	156	-21	1-1
475	3 17 23	-21 57.2	6	1.8	-1.48	-1.46	-2.75	-20041	1003	TAU4 ERI	212	-56	4-4
476	3 17 25	-24 17.9	5	1.6	1.02	-.91		-20042	1004		216	-57	4-4
477	3 17 30	28 1.5	18	2.9	.56			30062	999	DO 9880	158	-23	1-1
478	3 17 54	31 46.1	19	2.6	1.37					DO 9877	156	-21	1-1
479	3 17 56	24 58.9	17	2.9			-3.88				162	-28	1-1
480	3 18 18	-7 36.9	10	2.6	1.91		-3.46			N 1303	191	-50	2-3

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	H M S	O	S								O	O	
481	3 18 21	22 48.3	17	2.9	1.03						162	-28	1-1
482	3 18 39	70 16.9	18	1.4	.85	-1.85	-2.81	30063		DO 9900	135	11	5-6
483	3 19 31	32 3.9	19	2.6	1.06						157	-21	1-1
484	3 19 51	29 26.0	18	2.8	1.17	-1.35		60117	1009	DO 27024	158	-23	1-1
485	3 20 22	64 25.4	13	1.3	.04						138	6	4-5
486	3 20 31	-13 16.4	11	2.6		-1.18		50095	1017	ALF PER	199	-52	2-4
487	3 20 50	49 40.6	8	1.5	.16			-10047		VX ERI	147	-6	2-2
488	3 22 57	-12 30.2	8	2.2	1.61	-3.23	-3.99	50096		CIT 5	198	-51	3-4
489	3 22 58	47 21.2	11	1.3	-.92	-1.13	-3.32				148	-8	2-2
490	3 24 7	58 35.7	12	2.0							142	2	1-2
491	3 25 12	71 42.1	19	1.9	1.07			70043	1032	DO 27100	135	13	4-6
492	3 26 56	47 48.3	17	2.2	.77	-.79	-2.46	50098	1052	SIG PER	148	-7	2-2
493	3 27 28	-28 23.1	9	2.9		-1.68					224	-55	2-4
494	3 28 5	-2 5.8	16	3.3	.91			46		DO 587	195	-44	1-2
495	3 28 47	-36 9.0	13	3.9		-2.36	-3.19			EO	238	-55	1-2
496	3 29 2	19 54.8	17	3.2	.98						167	-29	1-1
497	3 30 36	-9 38.9	8	2.3	1.27	-1.26		-10048	1084	EPS ERI	196	-48	3-4
498	3 31 31	68 49.2	14	1.5		-.69					137	11	2-6
499	3 31 36	-37 6.5	16	3.9		-4.16	-4.71			EO	239	-55	1-2
500	3 31 55	-16 20.2	7	2.0	-.47	-1.78	-2.49	-20043		RT ERI	205	-51	4-4
501	3 32 59	-36 55.9	16	3.9			-4.63				239	-54	1-2
502	3 34 38	-6 51.2	11	2.6			-3.72			1 0337	193	-46	2-4
503	3 36 6	-33 1.5	8	2.2		-1.63	-3.16			DO 27390	232	-54	2-3
504	3 37 11	61 36.4	17	2.0	1.50			60123		U CAM	142	5	2-3
505	3 37 24	62 29.5	8	1.0	-.55	-1.48		60124			141	6	3-3
506	3 37 45	63 3.0	22	2.7	-.06	-1.28		60125	1105	SVS 328	141	5	2-3
507	3 37 58	51 18.3	17	2.2	.30			50100		SVS 100294	148	-3	1-2
508	3 38 29	-12 52.3	10	2.9			-3.70				202	-48	2-4
509	3 38 37	-4 50.1	8	2.7	1.50		-2.32			SVS 100297	192	-44	2-4
510	3 38 37	-45 31.0	10	4.4	.05		-4.19			I 1986	253	-52	1-1
511	3 38 51	-10 53.7	7	2.0	1.14	-1.49	-3.14	-10049		VY ERI	199	-47	3-4
512	3 40 44	12 37.4	16	3.0	.62			10047		DO 633	175	-32	1-1
513	3 40 47	-9 57.3	7	2.0	1.14			-10050	1136	DEL ERI	198	-40	3-4
514	3 41 8	80 10.6	26	1.4	-.62	-1.23		80009		SS CEP	130	20	5-6
515	3 41 18	-31 10.5	7	2.3	1.20		-2.87	-30030			229	-52	3-3
516	3 41 47	-43 3.1	10	4.1		-3.03	-3.68			DO 27516	249	-52	1-1
517	3 42 27	53 45.5	17	2.1	1.22			50103		N 1449	147	-1	1-2
518	3 43 31	-4 20.0	9	2.8			-3.65			PI ERI	192	-42	2-4
519	3 43 46	-12 16.1	7	1.9	.04	-.70		-10051	1162	SVS 343	202	-46	4-4
520	3 44 55	65 22.4	17	1.7	-.91	-1.29	-2.05	70046	1155		140	9	4-4

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521	3 44 59	50 41.5	15	1.8	1.27			56106		DO 27580	149	-3	2-2
522	3 45 57	50 55.5	17	2.3	1.35			50108		AP PER	149	-3	2-2
523	3 46 3	63 30.4	17	1.9	1.01			60129		DO 27585	141	7	2-4
524	3 46 14	67 30.0	25	1.8	1.29			70047			139	10	2-5
525	3 46 16	-7 9.9	7	1.7	.55	-1.34		-10052		BR ERI	196	-43	4-4
526	3 48 15	-32 28.4	8	2.8	1.64	-.79	-2.40	-30031			232	-51	2-3
527	3 49 6	39 43.5	19	2.2	.65	-.86		40070			157	-11	1-1
528	3 49 17	44 55.5	20	2.4	.98			40071		DO 27661	153	-7	1-1
529	3 50 56	11 14.3	9	2.3	-1.69	-4.32	-5.32	10050		NML TAU	178	-31	1-1
530	3 51 22	-11 45.6	11	2.6			-2.88				202	-45	2-4
531	3 51 43	57 31.6	22	2.5	1.23			60133		DO 27693	146	3	2-3
532	3 51 44	-17 29.5	8	2.7	1.79						210	-47	2-4
533	3 53 57	-34 24.9	8	2.7	1.25		-4.60				235	-50	2-3
534	3 54 5	-13 45.6	7	2.2	1.45			-10054			205	-45	3-4
535	3 54 28	12 55.2	16	3.2		-3.47					177	-30	1-1
536	3 54 41	-35 10.6	8	2.7		-3.63					235	-50	2-3
537	3 55 41	-13 39.0	7	2.0	-1.24	-1.52		-10055	1231	GAM ERI	205	-44	4-4
538	3 58 13	57 2.6	16	1.5		-3.49					147	3	2-3
539	4 1 16	-33 52.0	7	2.2		-1.75	-3.73				234	-49	3-3
540	4 1 21	-24 34.1	6	2.1	1.35			-20048			221	-47	2-3
541	4 1 57	-19 16.3	9	2.7		-2.59					213	-45	2-4
542	4 2 3	-15 53.3	7	1.7	-1.06	-2.33	-3.11	-20049		V ERI	209	-44	4-4
543	4 3 33	-10 26.1	8	2.3	1.64			-10059			202	-41	3-4
544	4 4 1	23 39.7	17	2.7		-2.88					170	-21	1-1
545	4 4 20	42 52.2	20	2.2	.95			40074		1Y PER	R 157	-7	1-1
546	4 5 9	69 46.9	16	1.3	1.27	-1.69					139	13	3-6
547	4 6 19	-38 7.5	16	3.9		-1.55					241	-48	1-2
548	4 6 32	-8 14.9	7	1.6	1.27						200	-40	3-4
549	4 7 4	42 3.8	20	1.8	1.13			-10061		SW PER	158	-7	1-1
550	4 7 16	51 2.5	14	1.6		-.91	-4.12	40077		SHARP. 209	R 152	-0	2-2
551	4 8 36	2 14.7	11	2.6	1.05						190	-34	2-2
552	4 9 23	-25 16.7	7	2.3	.73	-1.20		53		DO 717	222	-45	3-3
553	4 11 7	-10 32.0	7	2.0	.98			-30033		W ERI	204	-40	4-4
554	4 11 11	-12 47.1	8	2.1	1.77		-3.12	-10062		BM ERI	206	-41	3-4
555	4 12 27	23 57.4	17	2.7	.57			20073		N 1535	172	-19	1-1
556	4 12 33	33 42.7	19	2.3						DO 10361			
557	4 12 56	-13 23.3	11	2.6	1.12	-1.30	-3.54	30079			164	-12	1-1
558	4 13 1	50 32.2	18	2.2	1.79					1 2047	207	-41	2-4
559	4 13 16	62 13.5	13	1.1	.69			50115		SY PER	153	0	2-2
560	4 13 39	31 14.9	19	2.4	1.02			60140		ZZ CAM	143	8	3-4
					.40			30080		DO 10379	166	-14	1-1

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	H M S	O	S								O	O	
561	4 14 38	1 24 8	16	3.9		-1.61					191	-33	1-2
562	4 15 8	38 13.7	11	2.8		-1.96					241	-46	2-2
563	4 15 38	-18 38.1	7	2.0	.61			-20052	1345	RS ERI			3-3
564	4 16 1	-20 49.9	8	2.8	.44			-20053			217	-43	2-3
565	4 16 28	40 56.7	20	1.8	.63	-1.82		40082		IR PER	160	-6	1-1
566	4 16 54	15 31.7	17	3.0	1.28			20074	1346	GAM TAU	179	-24	1-1
567	4 17 26	60 37.7	16	1.7	1.19	-1.75		60141	1335	DO 28206	146	8	4-4
568	4 17 27	-13 32.3	11	2.6	-1.69						208	-40	2-4
569	4 17 34	72 26.9	23	2.3	1.58					SX CAM	137	16	2-6
570	4 19 4	68 5.5	17	2.0	1.75						141	13	2-6
571	4 19 12	-22 18.7	8	2.7	1.74	-1.32					219	-42	2-3
572	4 19 24	20 42.8	10	2.2	.92			20075	1370	DO 10422	175	-20	1-1
573	4 20 15	6 24.6	15	3.4	.70						188	-29	1-2
574	4 20 43	-13 .3	8	2.1	1.63	-1.30					208	-39	3-4
575	4 20 47	73 12.5	28	2.2			-2.62				137	17	2-6
576	4 20 54	-38 40.6	16	3.8	1.04						242	-45	1-2
577	4 21 17	-5 41.0	9	2.8	.94						200	-35	2-3
578	4 21 40	-27 55.3	7	2.4	1.44	-1.23		-30034	1393	43 ERI	227	-43	3-3
579	4 22 17	-34 8.0	7	2.2	.38			-30039E		N 1580	235	-44	3-3
580	4 25 42	-5 13.8	10	2.7	1.36						200	-34	2-3
581	4 25 45	10 4.5	11	2.3	.39			10060		R TAU	185	-26	2-2
582	4 26 12	39 46.5	20	2.3	1.00			40089		G1 PER	162	-6	1-1
583	4 26 15	57 18.3	16	1.7	.35		-3.37	60143		RV CAM	149	6	3-3
584	4 26 52	5 5.0	11	2.3	1.20			10062		DO 787	190	-28	2-2
585	4 27 10	35 9.9	10	2.1	.17	-3.19	-3.71	40091		V346 PER	R 165	-9	1-1
586	4 27 55	27 24.1	18	2.4	.74			30087		DO 10530	171	-14	1-1
587	4 28 26	8 59.0	16	3.6	.74						187	-26	1-2
588	4 28 49	2 30.6	16	3.8	.32						193	-29	1-2
589	4 29 4	22 45.2	17	2.8			-3.70				175	-17	1-1
590	4 29 28	31 .6	19	2.5	.84			30088			169	-11	1-1
591	4 29 29	-37 9.6	17	3.8	1.06						240	-43	1-2
592	4 29 30	8 61.0	17	3.5	.95	-1.93					187	-26	1-2
593	4 29 43	48 36.4	11	1.9	.61			50121		DO 28391	156	1	1-2
594	4 30 10	1 57.2	16	3.8		-1.72					193	-29	1-2
595	4 30 40	62 8.6	13	1.2	-1.10	-1.98	-2.76	60144		DO 28489	146	10	4-4
596	4 31 27	-29 50.2	9	2.3	1.70	-1.02		-30036	1453	UP51 PHE	230	-42	2-3
597	4 31 47	2 1.9	16	3.8	.27						194	-29	1-2
598	4 31 49	-8 20.1	8	2.0	.43	-2.18		-10070	1451	47 ERI	204	-34	3-3
599	4 31 50	-9 3.6	10	2.8	1.56			-10071	1452	P14 ORI	205	-35	3-3
600	4 32 37	28 25.8	17	3.1	.56	-1.35		30090		IU TAU	171	-13	1-1

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	H M S	O ' "	S								O	O	
601	4 33 10	16 23.3	9	2.1	-3.13	-3.17		20087	1457	ALF TAU	191	-20	1-1
602	4 33 30	41 9.6	10	1.8	1.14	-1.48		40093	1454	58 PER	162	-4	1-1
603	4 33 39	-30 42.7	7	2.3	1.40			-30037	1464	UPS2 ERI	231	-41	2-3
604	4 33 47	-5 25.5	10	2.8	1.59			-10072			201	-32	2-3
605	4 34 29	-27 42.3	7	2.4	1.18			-30038		UU ERI	227	-40	3-3
606	4 34 59	66 3.3	22	2.4	-.01	-.78		70054		T CAM	143	13	2-4
607	4 35 19	10 28.7	16	3.5	-1.55	-1.55				R	196	-23	1-2
608	4 35 30	8 14.4	9	2.0	.59	-1.43		10066		RX TAU	198	-25	2-2
609	4 35 55	4 53.9	8	2.0	.87	-2.16	-2.97			SVS 427	192	-26	1-2
610	4 35 56	-14 26.7	7	2.3				-10073	1481	53 ERI	211	-36	3-3
611	4 36 0	59 58.7	21	2.1		-1.41	-3.63				148	9	2-4
612	4 37 27	17 25.5	16	3.1	.74						191	-19	1-2
613	4 37 39	-26 54.4	9	2.6		-.99	-3.67				226	-40	2-3
614	4 38 11	-19 45.2	7	2.4	-.50	-.50		-20059	1496	54 ERI	218	-37	3-3
615	4 38 15	-14 19.0	7	2.3	.01	-.88		-10075		8X ERI	212	-35	3-3
616	4 38 38	17 20.7	16	3.1	.77						191	-19	1-2
617	4 38 42	-38 18.4	10	2.7	.13	-1.67		-30034E		R CAE	241	-41	2-2
618	4 39 31	36 1.8	19	3.0		-2.81	-4.47			A	166	-7	1-1
619	4 39 38	6 47.2	11	2.5	1.20	-1.14		10068		BZ TAU	190	-25	2-2
620	4 40 28	69 34.7	27	2.4		-1.12				R	141	15	2-6
621	4 40 43	17 13.8	10	2.4	.51						101	-18	1-2
622	4 40 56	20 40.8	12	2.0	1.11	-2.17		20089		DO 10703	179	-16	2-2
623	4 41 24	-3 30.9	9	2.1							200	-30	2-3
624	4 41 44	32 51.6	19	2.5	.50			30093		DO 10715	169	-8	1-1
625	4 41 50	-8 23.4	12	3.9	1.73	-.60				R	206	-32	1-2
626	4 41 54	-0 42.7	16	3.1		-1.81					198	-28	1-2
627	4 41 59	-12 46.5	10	2.6	.97	-3.63		-10077			210	-34	2-2
628	4 42 19	2 14.4	15	3.4						R	195	-27	1-2
629	4 43 11	-37 39.8	11	3.5		-1.23	-4.47				241	-40	1-2
630	4 43 23	14 58.0	11	2.1			-4.17				184	-19	2-2
631	4 43 56	14 47.8	15	2.8	1.20						184	-19	1-2
632	4 44 38	61 25.8	17	1.4	.98	-1.25		60145		SVS 100406	148	11	3-4
633	4 46 11	68 5.3	13	1.1	-.33	-1.32	-2.43	70055		ST CAM	142	15	5-5
634	4 46 12	-3 57.5	10	2.6		-.49	-3.52				202	-29	2-3
635	4 46 44	37 23.4	13	1.7	1.05			40099	1533		165	-5	2-2
636	4 47 34	63 25.5	16	1.7	.51			60147	1527		146	12	3-4
637	4 48 2	8 43.4	17	3.5	1.30						190	-22	1-2
638	4 48 5	52 46.1	25	2.9	.81						155	6	1-2
639	4 48 33	28 25.6	12	2.0	.20			30098		TT TAU	174	-10	2-2
640	4 48 46	-24 9.4	10	2.7	1.85		-3.35				224	-36	2-3

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	H M S	D M S	S											
641	4 49 2	-4 58.8	10 2.5		1.61					1 2100	203	-29	1-2	
642	4 49 12	10 24.5	16 3.1		-.69						199	-21	1-2	
643	4 49 21	28 25.4	18 2.3		.76			40101		DO 10800	166	-3	1-2	
644	4 49 45	14 9.1	11 2.1		-.88	-1.19		10072	1556	OM11 ORI	195	-18	2-2	
645	4 50 10	22 51.2	9 2.0		1.42						178	-13	1-2	
646	4 50 39	38 9.0	20 2.5			-2.88					166	3	1-2	
647	4 50 40	2 25.4	15 3.7		.54			64	1562	5 ORI	156	-25	1-2	
648	4 52 56	59 3.8	13 1.3		.79	-1.33		60149		DO 28749	150	10	4-4	
649	4 52 57	-2 58.7	12 4.1		1.29						202	-27	1-2	
650	4 53 18	-4 45.6	10 2.7		1.30						203	-28	2-2	
651	4 53 20	53 9.4	19 1.6		.52						155	6	1-2	
652	4 53 26	13 28.2	16 3.1		.82			10075	1500	OM12 ORI	187	-18	1-2	
653	4 53 27	-0 42.5	16 3.1		.	-3.40					.99	-26	1-2	
654	4 53 51	33 4.6	8 2.0		-1.05	-1.62		30100	1577	101 AUR	171	-6	1-2	
655	4 54 18	48 23.2	17 1.8		1.41			50132		TV AUR	129	4	2-2	
656	4 54 58	-12 52.1	16 3.6		1.00						212	-31	1-2	
657	4 55 21	-34 23.2	11 4.1		.	-2.41					237	-37	1-2	
658	4 55 47	38 59.9	19 2.2		1.59	-4.21		65	1601	P16 ORI	166	-2	1-2	
659	4 55 53	1 38.1	16 3.5		1.17						198	-24	1-2	
660	4 55 53	-13 3.6	16 3.7		.98						212	-31	1-2	
661	4 56 6	-16 43.9	6 2.9		1.53			-20064			216	-32	2-3	
662	4 56 14	32 4.0	17 2.1		1.06						172	-6	1-2	
663	4 56 33	74 10.6	26 1.2		1.54			70657	1572	DO 28769	138	19	3-6	
664	4 56 45	56 6.8	16 1.5		-1.80	-4.22	-2.98	60150		TX CAM	153	9	3-3	
665	4 56 50	-12 41.0	10 2.3		1.02	-5.02					212	-31	1-2	
666	4 56 52	-13 13.8	16 3.7		.98						213	-31	1-2	
667	4 57 20	-14 54.0	5 1.7		-1.56	-2.96	-2.85	-10080	1607	R LEP	214	-31	3-3	
668	4 57 27	32 43.8	13 1.6		1.65					DO 10945	171	-6	2-2	
669	4 57 57	-28 7.3	10 3.0		1.75						229	-36	2-3	
670	4 58 20	43 45.3	14 1.7		1.15			40109	1605	EPS AUR	163	1	2-2	
671	4 59 0	60 22.6	22 2.0		1.39			60151	1603	BET CAM	R	150	11	2-4
672	4 59 5	50 35.1	23 1.8		.70			50135		EL AUR	157	5	1-2	
673	4 59 11	-1 55.9	16 3.3		1.60						201	-25	1-2	
674	4 59 12	40 59.9	20 1.9		-.26			40110	1612	ZTA AUR	165	-0	1-2	
675	4 59 19	9 24.2	16 3.4		1.09						191	-19	1-2	
676	4 59 53	10 33.9	16 3.3		1.07	-4.41					190	-18	1-2	
677	5 0 25	9 17.1	16 3.4		.80						191	-19	1-2	
678	5 2 3	6 44.1	15 3.4		.	-2.97					194	-20	1-2	
679	5 2 27	21 35.0	17 2.9		1.43						181	-12	1-2	
680	5 2 32	43 26.1	19 2.1		1.20	-3.64					163	2	1-2	



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681	5 2 41	44 47.5	11	1.7	.62			40111		DO 28343	162	2
682	5 2 43	-21 58.8	6	1.6	-.66	-1.92		-20066		T LEP	223	33
683	5 2 46	1 5.8	16	3.5	-1.22	-1.67		66	1648	W ORI	199	23
684	5 2 51	38 39.2	13	1.6	2.05			40112		DO 11024	167	1
685	5 3 12	-4 11.3	10	2.7						AQ ORI	204	25
686	5 3 12	34 47.5	13	1.6	1.23			30102		DO 11028	170	4
687	5 3 14	50 19.3	23	1.8	-1.37	-4.25					158	6
688	5 3 27	-22 27.0	9	2.1	-1.15			-20067	1654	EPS LEP	223	33
689	5 4 23	43 54.0	19	2.1	.91						163	2
690	5 4 30	0 11.1	15	3.6	.69						200	23
691	5 5 18	14 25.7	16	2.9		-4.27					187	15
692	5 5 18	42 30.9	14	1.6	1.41			40114		DO 28987	165	1
693	5 5 25	68 36.5	18	1.4	.93	-.81		70059		UX CAM	143	17
694	5 5 32	-12 40.7	10	2.6	1.39			-100P2			213	29
695	5 5 46	33 54.6	19	2.4	.78						177	4
696	5 6 14	79 41.7	67	2.8		-1.02	-3.34				133	23
697	5 6 26	22 59.2	12	1.9	1.24			20100			180	10
698	5 6 28	14 17.7	16	3.0	1.13			10078		DO 993	188	15
699	5 7 3	-34 37.0	8	2.4	-.34	-1.46		-30042E		SVS 507	238	35
700	5 7 24	52 48.5	17	1.7	.66	-2.05	-3.62	50137			156	8
701	5 7 51	-12 18.7	13	3.9	1.87						213	28
702	5 8 57	-11 53.1	10	2.6	-1.82	-2.33	-3.49	-10084	1693	RX LEP	213	28
703	5 9 5	38 35.6	18	2.1	.42					DO 11105	168	0
704	5 9 5	18 32.8	12	1.9		-4.12					184	12
705	5 10 8	-8 8.0	16	3.4		-1.13					209	26
706	5 10 31	2 48.2	16	3.3	1.15						198	20
707	5 11 10	0 32.5	10	2.4	1.70	-2.70		68	1698	RHO ORI	201	21
708	5 11 59	-0 36.6	9	2.2	.47			69	1703	DO 1025	202	22
709	5 12 4	49 30.0	16	1.5	.89			70		DO 1031	202	22
710	5 12 19	-8 17.1	10	2.6	.04			50138	1713	UX AUR	160	7
711	5 12 57	-33 15.2	17	3.5		-2.06		-10085		BET ORI	209	25
712	5 12 57	45 31.1	22	2.9							236	34
713	5 13 2	45 56.3	11	1.4	1.40	-.46					163	4
714	5 13 13	11 56.8	11	2.2	-.13	-2.04		50139	1708	ALF AUR	163	5
715	5 13 17	53 32.5	13	1.6	.71		-3.74	10081		V431 ORI	191	15
716	5 13 25	-29 1.9	10	2.7	-1.25	-2.56	-2.92	50141	1707	R AUR	156	9
717	5 13 50	34 20.6	13	1.6		-2.20					232	33
718	5 14 2	51 22.2	19	1.7	.98		-4.31			KY AUR	172	22
719	5 14 26	27 13.5	17	2.1	.74					DO 29113	158	8
720	5 14 34	42 44.3	11	1.4	-.06	-1.05		40119	1722	SVS 524	178	6
											165	3

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	H M S	O	S								O	O	
721	5 14 35	29 33.7	17	2.3	.94						176	-5	1-2
722	5 15 1	33 18.0	13	1.6	1.36					16 AUR	173	-2	2-2
723	5 15 4	27 5.0	17	2.1	.59						178	-6	1-2
724	5 15 7	63 13.4	15	1.1	.46	-2.04	-2.74				148	15	2-4
725	5 15 13	13 20.2	9	1.9	.66					DO 1049	190	-14	2-2
726	5 15 27	25 45.9	8	2.6	1.46		-2.60				228	-31	2-3
727	5 15 45	43 15.7	21	2.3	1.42					DO 29147	165	3	1-2
728	5 15 50	62 36.6	20	2.1	1.29				1720	DO 29132	149	14	2-4
729	5 16 11	-10 12.1	13	4.1	1.63						212	-25	1-2
730	5 16 53	-7 40.5	16	3.5	.41		-3.00				209	-24	1-2
731	5 17 3	27 9.0	17	2.1	.84						178	-6	1-2
732	5 17 23	-25 9.8	7	2.3	1.06						227	-31	3-3
733	5 17 43	-17 55.7	6	2.0	1.10	-1.40					220	-28	3-3
734	5 17 54	-7 49.5	16	3.5	.39					UV AUR	210	-24	1-2
735	5 18 26	32 29.2	17	2.0	1.39	-1.33				EO	174	-2	1-2
736	5 19 49	-8 42.6	10	2.6	1.57						211	-24	2-2
737	5 21 9	20 14.3	17	2.9	1.21						195	-9	1-2
738	5 21 26	33 33.0	17	2.0		-1.37					174	-1	1-2
739	5 21 43	36 8.2	10	1.8	1.59		-4.84			EX ORI	172	0	2-2
740	5 22 7	-6 12.3	9	2.2	.61		-2.98				208	-22	2-2
741	5 22 7	33 53.2	17	2.0	.70						173	-1	1-2
742	5 22 43	-0 18.3	10	2.7	1.59					BRIGHT NEB	203	-19	2-2
743	5 23 3	-1 20.1	9	2.3	-1.88		-4.71			BRIGHT NEB	204	-20	1-2
744	5 23 37	-0 40.8	15	4.1	1.56						203	-19	1-2
745	5 23 40	-33 34.4	9	3.8	.		-3.12				237	-32	1-1
746	5 23 41	48 40.7	13	1.6	1.39		-2.52			DO 29203	161	8	2-2
747	5 23 46	36 50.9	13	1.7	1.74					W AUR	171	1	2-2
748	5 23 52	34 6.3	7	1.4	-1.09	-1.57	-3.81			S AUR	173	-1	2-2
749	5 23 59	29 52.5	13	1.8	1.10					DO 11262	177	-3	2-2
750	5 24 15	33 51.4	17	2.0	.91						174	-1	1-2
751	5 24 17	23 3.4	12	1.9	.97						183	-7	2-2
752	5 25 20	17 11.8	16	3.0	1.18		-2.94			117 TAU	188	-10	1-2
753	5 25 21	63 0.0	19	1.3	.82					17 CAM	149	15	3-4
754	5 25 29	32 25.2	13	1.7	.67	-1.23				DO 11273	175	-1	2-2
755	5 25 31	38 59.4	7	1.3	1.33		-3.03			AD AUR	170	3	2-2
756	5 26 5	-20 49.1	7	1.9	.81					BET LEP	224	-27	3-3
757	5 26 40	-4 46.8	10	2.6	-1.71	-1.56				S ORI	208	-20	2-2
758	5 27 12	-17 17.6	19	2.0	2.08	-2.04				EO	163	7	1-2
759	5 27 16	-1 9.5	10	2.1	.51					CI ORI	204	-19	2-2
760	5 27 34	15 6.3	16	2.9	.		-3.22				190	-10	1-2

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761	5 28 8	18 30.8	10	1.7	1.27	-1.53	-4.20	20111		OV TAU	187	-8	2-2
762	5 28 22	-14 25.3	10	2.8		-2.09	-3.16				217	-24	2-2
763	5 28 52	26 13.7	17	3.2			-4.93			EO	181	-4	1-2
764	5 28 59	-13 26.6	16	3.4	1.52						216	-24	1-2
765	5 29 14	-12 24.8	10	2.5	1.72	-1.50					215	-23	2-2
766	5 29 23	-35 29.9	8	3.7	1.12	-1.00		-30049E	1862	EPS COL	240	-31	1-1
767	5 29 27	18 31.9	12	1.9	-1.13	-1.50		20112	1845	CE TAU	187	-8	2-2
768	5 29 37	65 1.9	25	2.4	1.41			70063		DO 29388	148	17	2-5
769	5 30 7	12 59.2	16	3.0	.65			10088		DO 1158	192	-11	1-1
770	5 30 29	23 57.8	17	2.6	.83						183	-5	1-2
771	5 30 31	-17 49.2	8	2.7	1.30	-.83		-20073	1865	ALF LEP	221	-25	2-3
772	5 31 14	-5 19.3	10	2.6		-.70				V468 ORI	209	-20	2-2
773	5 31 41	-0 45.3	16	3.3		-1.98				V543 ORI	205	-17	1-2
774	5 31 54	54 54.1	18	1.5	1.87			50147		DO 29442	157	12	2-3
775	5 31 54	34 3.5	19	2.6		-3.63				M 36	174	1	1-2
776	5 31 57	-5 14.8	11	2.6		-1.26				V473 ORI	209	-19	2-2
777	5 32 6	54 24.5	18	1.5	1.24			50148	1866	DO 19463	157	12	2-3
778	5 32 27	67 25.4	28	2.4	1.40					DO 29437	145	18	2-5
779	5 32 35	-5 27.2	8	2.2	-1.14	-5.41	-6.93	-10093		M 42	209	-19	2-2
780	5 32 35	8 40.1	16	3.1	.27		-3.84	10090		DO 1187	196	-13	1-1
781	5 32 37	-4 56.4	11	2.6	1.54	-2.38				N 1977	209	-19	2-2
782	5 32 47	38 .5	11	2.0	.94			40134		IX AUR	171	3	1-2
783	5 32 52	-5 8.5	14	3.9	1.69					SVS 623	209	-19	1-2
784	5 33 1	20 58.3	17	2.9	1.05						196	-6	1-2
785	5 34 14	68 40.7	28	2.0		-.83	-2.85				144	19	2-5
786	5 35 4	-1 48.2	11	2.5	.38	-1.54		80		X ORI	206	-17	2-2
787	5 35 27	42 35.7	19	1.7	.56						168	6	1-2
788	5 35 32	24 57.7	12	1.9	-.03	-1.66		20116		GP TAU	193	-3	2-2
789	5 35 55	18 25.8	16	2.5	.94						188	-7	1-2
790	5 36 2	36 39.9	18	2.2	1.43		-3.82				173	3	1-2
791	5 36 10	46 44.1	12	1.8		-1.80	-3.40	50149		DO 29520	164	8	2-2
792	5 36 24	-35 30.6	8	3.7	1.22						240	-30	1-1
793	5 36 37	-14 4.6	10	2.8	.19	-.56		-10094		RW LEP	218	-22	2-2
794	5 36 44	37 36.0	13	1.7	.20	-1.85		40135		RU AUR	172	4	2-2
795	5 37 11	-12 28.7	9	2.2	1.77						216	-22	1-2
796	5 37 19	-8 11.4	10	2.5	.70	-.93		-10095			212	-20	2-2
797	5 37 29	31 53.9	10	1.7	.51			30124	1939	DO 11453	177	1	2-2
798	5 37 53	-27 47.5	10	2.9	1.59	-.55					232	-27	2-3
799	5 37 56	13 45.7	16	3.0	1.11	-1.26					192	-9	1-1
800	5 37 57	28 3.6	9	2.1	.21			30125		AB TAU	180	-1	1-2

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	H M S	O ' S											
801	5 38 20	12 16.1	16	3.0	.50	.78		10094		DO 1241	EO	194	1-1
802	5 38 27	38 55.5	20	2.6	.39			40136		SZ AUR		171	1-2
803	5 38 38	17 28.0	16	2.8	1.11			20118		DO 11484		189	1-1
804	5 39 4	-4 8.9	11	2.6	1.16			82		Y ORI		209	2-2
805	5 39 5	32 .4	10	1.5	-.37	-1.77		30126		U AUR		177	2-2
806	5 39 6	-2 17.0	14	3.9		-2.02	-3.09			N 2023		207	1-2
807	5 39 14	-1 57.2	11	2.5	.51	-3.52	-6.29			NGC 2024	EO R	207	2-2
808	5 39 19	-20 47.6	10	2.6	1.52			-20076				225	2-3
809	5 40 36	32 41.1	13	1.7	.36	-2.28	-3.67			A		177	2-2
810	5 40 46	-23 47.6	9	2.5	.94	-2.69	-2.69	-20077		RT LEP		228	2-3
811	5 41 12	69 58.1	16	1.2	-.59	-2.96	-3.96	70066				143	5-5
812	5 42 12	24 22.7	9	2.0	.95			20120		TU TAU		184	1-2
813	5 44 1	2 9.6	15	4.1	1.64							203	1-2
814	5 44 6	0 4.4	9	2.2		-1.68	-3.04			N 2067	R	205	2-2
815	5 44 7	43 11.9	11	1.6	.83			40140				168	2-2
816	5 44 15	50 20.8	17	1.8	.77	-2.12				DO 29668		162	2-3
817	5 44 27	41 17.3	20	2.1	1.20					N 2071		170	1-2
818	5 44 29	0 18.4	9	2.2		-1.17	-3.96					205	2-2
819	5 45 5	-12 52.1	7	1.6	1.20			-10097				218	2-2
820	5 45 6	-21 34.1	7	2.2	1.50			-20080				226	2-3
821	5 47 10	18 27.3	16	2.5		-5.03				UPS AUR		190	1-1
822	5 47 40	37 17.9	7	1.3	.42	-1.05		40143	2011	DO 11629		173	2-2
823	5 48 20	32 5.1	13	1.7	1.10	-1.28		30129	2018			178	2-2
824	5 48 22	40 7.0	20	2.7								171	1-2
825	5 48 38	0 12.9	15	3.5	1.58							206	1-2
826	5 49 5	63 1.9	14	1.6	1.19	-1.28		60159		TZ CAM		150	4-5
827	5 49 7	61 31.8	23	1.7	1.71							152	2-4
828	5 49 7	-20 53.2	7	1.9	1.02	-3.25		-20081	2035	DEL LEP		226	3-3
829	5 49 12	-35 48.8	8	1.8	.35	-.99		-30056E	2040	BETA COL		241	1-1
830	5 49 49	1 51.2	10	2.1	1.81			89	2037	56 ORI		204	2-2
831	5 50 15	64 57.1	13	1.2	1.61	-.29		60160		SVS 6403		149	3-5
832	5 50 40	39 30.9	14	1.6	.87	-.28	-3.48	40145		DO 11680		172	2-2
833	5 51 40	-1 3.6	11	2.5	1.67			90		DO 1329		207	2-2
834	5 52 10	0 57.8	7	1.7	1.64			91	2057			205	2-2
835	5 52 25	41 29.3	20	1.8		-1.32						170	1-2
836	5 52 26	7 24.8	10	2.3	<-3.64	-5.36	-5.81	10100	2064	ALF ORI		200	2-2
837	5 52 57	20 9.2	16	2.8	-1.48			20127	2063	U ORI		189	1-1
838	5 53 6	2 18.7	15	4.1	1.67							204	1-2
839	5 53 21	45 30.2	12	1.7	.13	-1.54	-3.35	50153		TW AUR		167	3-3
840	5 53 32	29 18.6	18	3.0		-4.01						181	1-2

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	H M S	O ' ' ' S											
841	5 53 35	35 34.9	11	1.9	.14	-1.47		40146		DO 11724	175	5	2-2
842	5 53 43	48 21.6	13	1.2	1.32	-1.41		50154		LO AUR	164	12	3-3
843	5 53 46	22 50.4	17	2.5	.34			20129		BO ORI	187	-1	1-1
844	5 53 50	6 45.4	16	4.0	1.11					DO 1340	201	-9	1-2
845	5 54 39	15 45.3	16	2.8		-1.42					193	-4	1-1
846	5 55 7	2 42.1	11	2.6	1.53			92		DO 1342	204	-11	2-2
847	5 55 33	-33 6.8	10	4.1	1.43						239	-25	1-1
848	5 55 34	54 16.8	14	1.3	1.05			50155	2077	DEL AUR	159	15	3-3
849	5 55 58	74 31.1	19	1.2	.12	-1.69	-2.65	70067		V CAM	139	23	6-6
850	5 55 59	38 24.9	14	1.7	.90	-1.54		40149			173	7	2-2
851	5 56 13	45 56.6	11	1.7	-1.08	-1.68		50156	2091	PI AUR	157	11	3-3
852	5 56 20	-23 22.9	8	2.6		.81					229	-22	2-2
853	5 57 33	39 39.0	9	1.7	1.19		-3.28	40151		AZ AUR	172	8	1-2
854	5 57 59	37 44.4	19	2.0	1.06						174	7	1-2
855	5 58 34	6 1.7	16	4.0	1.56						202	-8	1-2
856	5 58 54	10 54.6	11	2.5	.39			10103		DP ORI	197	-6	2-2
857	5 59 8	-7 36.1	14	3.8	1.17						214	-15	1-2
858	5 59 11	-2 19.8	15	3.9	-.60	-1.17		96		V352 ORI	209	-12	1-2
859	5 59 21	1 51.0	16	4.0		-1.09					206	-10	1-2
860	5 59 28	37 43.9	19	2.0	.81						174	8	1-2
861	5 59 32	-2 55.2	15	3.9	.97						210	-12	1-2
862	5 59 56	50 37.7	14	1.2	1.39			50158		DO 29938	163	14	3-3
863	6 0 19	-44 45.5	10	4.2		-4.18	-4.42				252	-27	1-1
864	6 1 6	28 28.1	17	2.8	.91	-.03		30136		BS AUR	192	3	1-1
865	6 1 18	7 25.4	11	2.4		-2.33	-2.51				201	-7	2-2
866	6 1 27	67 44.4	22	1.7	1.50						145	21	2-5
867	6 1 58	-32 30.6	10	4.1		-2.52					239	-24	1-1
868	6 2 26	37 43.6	19	2.0	.80						174	8	1-2
869	6 2 30	68 48.6	23	1.9	1.53						145	21	2-5
870	6 2 41	-16 28.6	8	2.3	.48	-1.48		-20084	2148	17 LEP	223	-18	3-3
871	6 3 14	10 7.0	16	3.1	1.23						199	-5	1-2
872	6 3 44	-24 11.5	8	2.7	-.77	-2.13	-2.40	-20085	2156	DO 1405	230	-20	2-2
873	6 3 56	-5 43.3	10	2.7	1.53	-.80		-10109		S LEP	213	-13	2-2
874	6 4 50	-21 47.9	7	2.3	.08	-3.02		-20086	2166		228	-19	2-2
875	6 5 18	2 34.5	14	3.3	-.06						206	-8	1-2
876	6 5 19	34 53.7	18	2.1	.75			30139		DO 11943	177	7	1-2
877	6 5 20	-6 23.4	10	2.6	.54	-2.68	-5.46			N 2170	214	-13	2-2
878	6 5 26	-19 8.0	10	2.6	.66			-20087	2168	19 LEP	226	-18	2-3
879	6 6 7	36 14.8	11	2.1		-2.70	-3.02			DO 11941	176	8	1-2
880	6 6 24	-6 47.4	16	3.0	.94						214	-13	1-2

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881	6 6 39	47 44.5	16	2.1	1.18			50160		DO 30067	166	13	2-3
882	6 6 51	60 28.6	16	1.1	1.21	-3.39		60163		DO 30048	154	19	3-5
883	6 7 2	31 23.5	18	2.3	.42			30141		BU AUR	121	6	1-1
884	6 7 20	65 43.9	20	1.9	1.42	-1.15		70069	2165	36 CAM	149	21	4-5
885	6 7 34	-19 7.8	14	3.7		-1.29					226	-18	1-2
886	6 7 37	14 11.5	16	2.8		-2.61				BRIGHT NEB	196	-2	1-1
887	6 8 2	34 52.0	19	2.8	1.16						178	8	1-2
888	6 8 6	3 46.5	11	2.5	1.07			99		MWC 792	205	-7	2-2
889	6 8 10	-31 42.7	11	4.0		-3.46					238	-22	1-1
890	6 8 25	-6 11.9	10	2.6		-4.61				N 2163	214	-12	2-2
891	6 8 28	11 15.3	17	3.8	1.36			10109		DO 1438	198	-4	1-2
892	6 8 57	-7 13.9	9	2.3	1.73			-10111			215	-12	1-2
893	6 9 8	21 50.5	9	2.1	.70	-1.25		20134	2190	TV GEM	189	2	1-1
894	6 9 11	32 42.2	18	2.2	1.22	-3.46		30144	2189		190	7	1-1
895	6 9 22	22 53.8	17	2.6	.48	-1.37		20156	2197	BU GEM	R 188	2	1-1
896	6 10 4	17 59.3	16	2.9		-1.85	-2.82			SHARP. 257	R 193	-0	1-1
897	6 10 8	18 33.6	16	2.6	.88		-2.90	20138		GI ORI	192	0	1-1
898	6 10 26	43 42.6	15	2.0		-1.42					170	12	2-3
899	6 10 45	2 13.1	16	3.7	1.44						R 211	-10	1-2
900	6 11 2	76 42.0	61	3.7	1.33			80013		DO 30069	R 137	24	2-6
901	6 11 12	00 1.8	25	2.6	1.53		-2.96	60164	2201	40 CAM	154	19	2-5
902	6 11 31	13 52.3	10	2.0		-.90				SHARP. 289	196	-2	2-2
903	6 12 9	56 45.8	16	1.7	.50	-.05		60165		DO 30164	158	18	3-3
904	6 12 15	-8 33.7	16	3.0	.96						216	-12	1-2
905	6 12 23	-6 15.9	8	2.3	.67			-10113	2227	GAM MON	214	-11	2-2
906	6 13 7	-10 57.7	14	3.7	1.27						219	-13	1-2
907	6 13 12	61 31.2	16	1.2	-.52	-1.99		60166	2215	1 LYN	153	20	2-5
908	6 14 0	-27 27.1	11	4.0	.57			-30055			235	-19	1-1
909	6 14 2	33 13.1	9	1.9	-.02	-1.06		30148		VW AUR	190	8	1-1
910	6 15 3	8 31.4	11	2.4	1.23			10113		GK ORI	202	-4	2-2
911	6 16 39	83 52.3	90	3.2			-3.65				130	26	2-6
912	6 17 6	-12 36.6	14	3.6	1.59			-10117	2275	MWC 802	221	-13	1-2
913	6 17 19	-2 54.2	11	2.5	.50			100		DO 1511	212	-8	2-2
914	6 17 32	2 33.2	15	3.4	1.53	-3.18					207	-6	1-2
915	6 17 36	-10 36.1	7	1.6	.54	-2.52	-3.85				A 219	-12	2-2
916	6 18 4	11 59.5	17	3.8	1.35						199	11	1-2
917	6 18 9	38 22.3	14	1.7	.69	-2.51	-4.21				175	11	2-3
918	6 18 14	11 35.1	11	2.7	.98	-1.43				DO 1513	199	-1	1-2
919	6 18 17	2 37.4	10	2.6	1.27			101		DO 1522	207	-6	2-2
920	6 19 13	7 22.5	11	2.3	1.31			10118		BN MON	203	-3	2-2

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	H M S	O . ' .	S										
921	6 19 21	-3 51.0	11	2.4	1.94	-1.50		102		MU GEM	213	-8	2-2
922	6 19 4	22 32.3	9	2.0	-2.22	-2.20		20141	2286	FU MON	190	4	1-1
923	6 19 48	3 27.2	11	2.4	1.0			103		DEL COL	207	-5	2-2
924	6 20 8	-33 21.9	11	4.0	1.21			-30064E	2286	V MON	241	-20	1-1
925	6 20 9	-2 10.9	11	2.3	.09			104			212	-7	2-2
926	6 20 37	59 11.5	20	1.5	1.63						156	20	2-5
927	6 20 46	49 18.5	13	1.5	.24	-1.18		50164	2289	PS11 AUR	165	16	3-3
928	6 21 40	-0 4.7	15	3.9	1.52			106			210	-6	1-2
929	6 21 43	13 2.8	16	2.9		-1.94				DO 1560	198	0	1-2
930	6 22 26	-2 57.7	11	2.4	1.77			109			213	-7	2-2
931	6 22 33	58 27.4	13	1.4	1.07			60167	2293	5 LYN	157	20	4-5
932	6 22 38	-32 7.1	11	4.1	1.63						240	-19	1-1
933	6 22 39	-9 6.5	11	2.4	.33	-1.19		-10122		BL ORI	218	-10	2-2
934	6 22 43	14 44.1	10	1.9	.21	-.63		10121	2308		197	1	2-2
935	6 23 2	-9 29.1	14	3.7	.98	-1.05					219	-10	1-2
936	6 23 15	5 35.1	15	3.8	1.04						205	-3	1-2
937	6 23 16	19 6.0	12	2.1	1.48		-2.51	20145		AB GEM	193	3	2-2
938	5 23 32	68 57.4	32	2.4	1.74	-.98					146	23	2-5
939	5 23 45	-18 20.1	13	4.1	1.67					VW MON	227	-14	1-2
940	6 23 56	9 3.6	11	2.5	1.68	-1.05					202	-1	2-2
941	6 24 4	3 45.2	16	3.8	1.45						207	-4	1-2
942	6 24 18	-7 50.2	9	2.0		-2.82		-10123		SVS 756	217	-9	2-2
943	6 24 20	5 25.3	11	2.5	1.61			10124		SW MON	205	-3	2-2
944	6 24 35	-19 35.3	10	2.9	.87	-2.90				V LYN	228	-14	2-2
945	6 25 13	61 35.2	12	1.2				60168			153	21	5-5
946	6 26 3	73 37.1	25	1.6	1.24	-1.44	-2.94				141	25	3-6
947	6 26 10	16 36.4	11	2.4	.51			20147		AQ GEM	196	3	2-2
948	6 26 52	-8 3.7	11	2.3	1.43			-10124			218	-9	2-2
949	6 27 36	8 7.9	16	3.7	1.41			10125		DO 1612	203	-1	1-2
950	6 27 57	27 28.7	9	1.9	-.11	-1.33		30153		DW GEM	186	8	1-1
951	6 28 19	10 27.5	11	2.4	1.99	-.49				V461 MON	201	0	2-2
952	6 28 39	54 1.2	19	2.4		-1.92					161	19	2-3
953	6 28 50	46 56.8	13	1.8	1.91	-1.57		50168			168	16	3-3
954	6 29 22	43 19.4	14	1.7	1.31	-1.38					172	15	2-3
955	6 29 40	40 44.6	11	1.4	1.11	-1.43		40156		DO 12285	174	14	2-2
956	6 29 57	60 59.3	13	1.2	-.49	-2.90	-3.55	60169		DO 30551	154	22	5-5
957	6 30 15	55 24.1	12	1.7	1.43	-3.08		60170	2376	7 LYN	160	20	2-4
958	6 30 26	64 7.1	18	1.6	.99			60171		RT CAM	151	23	3-5
959	6 31 42	16 4.9	11	2.4	.83			20152		CR GEM	197	4	2-2
960	6 31 52	60 42.2	20	2.3	1.32	-3.66					155	22	3-5

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	H M S	D M S	S												
961	6 31 55	4 16.6	16	3.8						AR	207	-2			1-2
962	6 31 56	45 40.9	13	1.9	.65			50170		TU AUR	170	16			2-3
963	6 32 1	-29 13.7	12	4.1	1.63						238	-16			1-1
964	6 32 2	4 59.1	11	2.2	1.13			10126		DO 1635	207	-1			2-2
965	6 32 18	-12 26.3	9	2.3	1.63						222	-9			1-2
966	6 33 5	38 28.7	11	1.6	-1.34			40158	2405	UU AUR	177	14			2-2
967	6 33 6	14 15.1	12	2.3	1.20			10128		NY GEM	199	3			2-2
968	6 33 19	-5 20.5	9	2.1	-.31			-10131		GL MOI:	216	-6			2-2
969	6 33 58	17 46.3	16	2.8	-1.45						195	5			1-2
970	6 34 9	21 9.2	10	1.9	-1.44			20153		AX GEM	192	6			2-2
					1.26										
971	6 34 20	3 25.4	16	3.0	.47						208	-2			1-2
972	6 34 33	-19 13.6	10	2.9	1.39			-20096	2429	NU2 CMA	229	-12			2-2
973	6 34 38	81 45.8	101	4.2	1.24						132	27			2-6
974	6 34 42	10 57.2	17	3.6	1.65			20154	2421	GAM GEM	202	2			1-2
975	6 34 44	16 25.7	11	2.4	1.59						197	4			2-2
976	6 34 47	14 42.7	17	3.6	1.53			10129		UU GEM	198	4			1-2
977	6 34 57	-1 21.3	9	1.9	.26			119		SY MON	213	-4			2-2
978	6 35 7	-2 46.6	15	3.6	1.50					V495 MON	214	-4			1-2
979	6 35 26	12 19.6	16	3.0							201	3			1-2
980	6 35 45	-18 12.3	10	2.8	1.20			-20098	2443	NU3 CMA	228	-11			2-2
981	6 35 49	5 16.4	11	2.5	1.48			10130		DO 1689	207	-0			2-2
982	6 36 10	59 51.5	14	1.4	.41			60172		U LYN	156	22			5-5
983	6 36 14	6 25.4	15	3.3	.91						205	0			1-2
984	6 36 51	2 25.2	15	3.4	1.03						209	-2			1-2
985	6 36 52	-14 4.6	10	2.9	1.01			-10135	2450		224	-9			2-2
986	6 36 57	-2 25.3	10	2.3	1.86			122		DO 1697	214	-4			1-2
987	6 37 1	20 31.5	12	2.2	1.70			20156		DO 12420	193	7			2-2
988	6 38 35	27 5.7	19	2.8	1.22						198	10			1-2
989	6 38 37	9 30.5	9	2.0	1.49					V371 MON	203	2			2-2
990	6 38 48	2 48.5	16	3.7	1.55			-3.09			209	-1			1-2
991	6 38 53	55 32.1	12	1.4	.97			60173		SU LYN	160	21			5-5
992	6 39 10	-4 33.1	11	2.4	-1.28			123		V372 MON	216	-4			2-2
993	6 39 15	-16 57.9	13	4.3	1.53						227	-10			1-2
994	6 39 15	44 33.9	15	2.1	.94			40161	2459	PS14 AUR	171	17			2-2
995	6 39 23	8 50.1	16	3.6	1.03						204	2			1-2
996	6 39 39	1 24.1	16	3.5	1.55						211	-1			1-2
997	6 40 10	-18 55.2	10	2.7	1.36			-20102		SVS 842	229	-10			2-2
998	6 40 12	37 59.1	23	2.4	1.54			60175		S LYN	158	22			2-5
999	6 40 18	-14 23.7	8	2.4	.57			-10138		DY CMA	225	-8			2-2
1000	6 40 22	-1 43.6	11	2.2	2.36					GT MON	214	-5			2-2
								-2.46							



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	H M S	O	S								O	O	
1001	6 40 53	25 10.1	13	2.0	-1.14	-1.04		30164	2473	EPS CEM	190	10	2-2
1002	6 41 5	-27 23.5	13	4.0	1.44						237	-14	1-1
1003	6 41 27	77 2.3	31	1.6	.85	.49		80015		DO 30694	137	26	4 6
1004	6 41 36	29 .4	13	2.0	1.44			30165	2480	28 GEM	186	11	2-2
1005	6 41 49	43 33.2	22	2.7	.	-3.26					172	17	1-2
1006	6 42 27	59 3.4	19	2.2	.53	-2.62				EO	157	22	2-5
1007	6 42 49	-16 37.6	9	2.3	-1.15	-1.35		-20105	2491	ALF CMA	227	.9	2-2
1008	6 43 28	-36 30.1	13	4.0	1.22	-3.54		-30071E		CH PUP	246	-17	1-1
1009	6 44 4	30 18.9	13	1.9	1.18			30166		X GEM	185	12	2-2
1010	6 44 17	8 6.2	9	1.8	1.51			10138	2503	ST MON	205	3	2-2
1011	6 44 27	-4 22.7	15	3.6	1.38	-2.79				EO	216	-3	1-1
1012	6 44 53	-20 14.8	15	3.4	.84			-20107			231	-10	1-2
1013	6 45 6	24 3.2	17	2.5	.72						191	10	1-2
1014	6 45 7	-8 54.4	15	3.6	.34			-10139	2508		220	.5	1-1
1015	6 45 32	-13 17.0	10	2.7	1.62	-1.20					224	.7	2-2
1016	6 45 59	-16 13.9	14	4.2	1.28	-1.23				EO CMA	227	.8	1-2
1017	6 47 4	3 1.4	10	2.3	.84			131		6.400	210	1	1-2
1018	6 47 23	11 22.6	17	3.5	1.40						203	5	1-2
1019	6 48 28	56 13.6	23	2.8		-3.08					160	22	2-5
1020	5 49 2	5 49.5	11	2.5	1.36	-4.20					208	3	2-2
1021	6 49 18	51 4.5	14	1.2	.71	.66		60176		DO 30947	155	24	5-5
1022	6 49 22	4 49.0	9	1.8	.23	.72		134		SX MON	209	2	2-2
1023	6 49 23	-33 27.0	13	4.0		-4.04					243	-15	1-1
1024	6 49 27	20 54.0	18	3.3	1.66						194	10	1-2
1025	6 49 36	66 12.5	22	1.5		.74		-2.26			149	25	2-5
1026	6 49 50	4 10.6	16	3.5	1.29						209	2	1-2
1027	6 50 4	1 2.6	14	3.7	1.72						212	1	1-2
1028	6 50 8	8 27.9	11	2.3	.65	-2.51		-3.35		GX MON	206	4	2-2
1029	6 50 30	4 51.7	16	3.3	1.46			10143			209	3	1-2
1030	6 50 33	-37 9.0	13	4.0	1.55						247	-16	1-1
1031	6 51 4	-10 1.4	14	3.5		-2.77					222	.4	1-2
1032	6 51 9	-27 42.4	13	4.3	1.58						238	-12	1-1
1033	6 51 39	-14 18.4	14	4.2	1.34						226	.6	1-2
1034	6 51 45	-11 55.8	10	2.6	.34			-10140	2574	THET CMA	224	.5	2-2
1035	6 52 9	-24 10.1	14	4.2	.13			-20112	2580	OM11 CMA	233	-10	1-1
1036	6 52 28	77 2.6	38	2.0	1.06			80016	2527		138	27	3-6
1037	6 52 41	-14 47.0	14	3.8	1.94	-2.50					227	.6	1-2
1038	6 53 5	6 24.9	11	2.4	.24	.84		10144		CL MON	208	4	2-2
1039	6 53 12	-2 16.1	16	3.3	1.19						215	.0	1-1
1040	6 53 46	70 11.2	34	2.6		.77					145	26	2-5

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1041	6 53 54	-14 4	14	4.2	1.54			-10141	2593	NU CMA DO 12662	R 226	5	1-2
1042	6 53 54	37 27.1	14	1.7	1.22			40167		AZ MON	179	17	2-3
1043	6 55 10	3 21.8	10	2.3	1.09			140		V523 MON	211	3	1-1
1044	6 55 36	-8 55.2	14	3.4	1.16			-10143		RV MON	222	3	1-1
1045	6 55 36	6 15.3	9	2.1	.77		-2.38	10146			208	4	2-2
1046	6 55 38	15 45.7	17	3.3	1.54						200	9	1-2
1047	6 55 54	-19 12.1	13	4.3		-1.53					231	7	1-1
1048	6 56 3	8 31.5	16	3.5	1.64						R 206	5	1-2
1049	6 56 23	5 42.6	15	3.3		-1.69					209	4	1-2
1050	6 57 1	55 23.6	14	1.5	1.50			60179		R LYN	161	23	4-5
1051	6 57 23	16 9.2	11	2.4	1.21			20163	2615	41 GEM RS GEM	199	9	2-2
1052	6 58 18	30 35.3	13	2.0	1.58		-3.88	30171		DO 1886	126	15	2-3
1053	6 58 37	-3 11.4	9	2.3	1.08			141			217	1	1-1
1054	6 59 4	15 43.9	17	3.3	1.67			20166	2631	DO 12743	200	9	1-2
1055	6 59 20	17 50.6	11	2.2	.30						198	10	2-2
1056	6 59 37	16 41.3	9	2.0	1.34			20167	2635	DO 12745	199	10	2-2
1057	6 59 38	-27 52.3	10	2.3	.72	-1.51	-2.43	-30072	2640	SIG CMA	239	10	1-1
1058	7 0 4	-4 33.6	15	3.5	1.41						218	0	1-1
1059	7 1 26	-11 29.7	9	2.3	1.16	-1.65	-3.27			Z CMA	225	3	2-2
1060	7 2 9	-8 53.1	11	2.7	1.15	-1.47		-10147		HN MON	222	1	2-2
1061	7 2 36	10 38.6	16	3.5	1.50			10150		DO 1930	205	8	1-2
1062	7 2 41	-14 57.1	10	2.9	1.35	-1.59				SVS 100807	228	4	2-2
1063	7 3 17	-40 58.7	15	4.3	1.65		-4.16				222	15	1-1
1064	7 3 22	-35 51.4	10	2.2	-1.01	-1.84	-3.22	-30073E			247	13	1-1
1065	7 3 30	-25 2.5	14	4.2	.68			-30073			237	8	1-1
1066	7 3 32	12 44.1	16	3.0	1.13					DO 1935	203	9	1-2
1067	7 4 6	8 58.3	15	3.5	1.21			10153		V CMI	207	7	1-1
1068	7 4 10	28 22.7	10	1.8	1.48		-1.39	30176		AM GEM	129	16	3-3
1069	7 4 15	63 17.8	28	2.5		-1.95				RY MON	153	26	2-5
1070	7 4 31	-7 29.4	9	2.2	.17	-1.11		-10149			221	0	1-1
1071	7 4 57	-32 23.2	18	4.6	.82						244	11	1-1
1072	7 4 57	66 1.8	18	1.4	1.46	-1.89		70074		DO 12802	150	26	3-5
1073	7 5 16	24 10.1	13	2.0	.82			20172			193	14	2-3
1074	7 5 27	-10 39.3	10	2.8	1.36	-1.72	-3.07	-10151			224	1	2-2
1075	7 5 44	-11 50.6	9	2.3	.32	-1.35		-10152		W CMA	225	2	2-2
1076	7 6 4	10 53.9	16	3.0	1.26	-1.80					205	9	1-2
1077	7 6 14	4 12.3	16	3.5	1.64			146		DO 1964	211	6	1-1
1078	7 6 15	-26 16.1	10	2.2	.20			-30076	2593	OEL CMA	238	8	1-1
1079	7 7 54	40 50.4	14	1.5		.98				72 AUR	177	21	2-3
1080	7 7 57	30 19.2	9	1.4	1.14			20178	2697	TAU GEM	187	17	3-3

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	H M S	O	S								O	O	
1081	7 8 21	39 24.7	7	1.3	1.24	-1.93		40170	2696	63 AUR	178	20	2.3
1082	7 9 0	-29 1.7	14	4.2	.57			-30078		SVS 983	241	9	1.1
1083	7 9 23	51 31.3	14	1.5	.63			50175	2703	SVS 982	156	2	3.3
1084	7 9 37	68 53.3	19	1.5	1.05			70075		AA CAN	147	27	4.5
1085	7 9 55	-20 13.3	14	4.1	.22	-2.21					233	5	1.1
1086	7 10 28	16 14.9	9	2.0	.43	-1.05	-3.35	20175	2717	60 GEM	201	12	2.2
1087	7 10 34	-7 52.5	11	2.7	1.27			-10153		AM MOI	222	1	2.2
1088	7 11 3	-6 2.2	14	3.7	-1.22						221	2	1.1
1089	7 11 41	24 58.4	13	2.0	1.57	-1.36		20176	2725	52 GEM	193	16	2.3
1090	7 12 37	-9 31.2	9	2.2	1.71		-3.77				224	1	1.2
1091	7 12 41	27 59.1	9	1.6	1.36	-1.44		30179	2738	53 GEM	150	17	3.3
1092	7 13 4	5 8.6	16	3.1	1.55			10158		DO 2053	211	8	1.1
1093	7 14 6	85 41.5	200	5.4	-1.23					N 2300	128	28	2.6
1094	7 14 26	48 36.2	12	1.4	.74	-1.58		50177		RS LVL	169	24	3.3
1095	7 14 34	-23 15.3	14	4.0	.47			-20125	2764	SVS 100845	237	5	1.1
1096	7 14 38	-27 49.5	11	2.4	.04			-30083	2766		241	7	1.1
1097	7 14 46	39 12.8	14	1.7	1.67			40171		DO 12910	179	22	2.3
1098	7 15 3	38 9.2	14	1.7	-1.19	-1.18		40172		DO 12919	190	21	2.3
1099	7 15 14	-34 42.5	10	2.3	.30	-1.83		-30075E			247	10	1.1
1100	7 15 24	76 15.8	56	3.2	1.33						139	28	2.6
1101	7 16 21	-15 44.9	15	4.1	1.25		-3.21				230	1	1.1
1102	7 16 35	79 52.7	68	3.3		.53	-3.72				114	28	2.6
1103	7 17 1	22 5.2	10	1.9	1.57			20177	2777	DEL GEM	156	16	2.3
1104	7 17 56	55 55.0	21	2.0	1.62			60182		SVS 100850	161	26	2.4
1105	7 18 49	4 43.7	16	3.1	1.92						212	9	1.1
1106	7 18 53	87 7.3	243	5.3	.66				2609	SVS 927	126	28	6.6
1107	7 19 9	-11 21.3	16	4.2			-3.15				247	1	1.2
1108	7 20 13	-20 25.7	15	4.1	.46			-20129			235	3	1.1
1109	7 20 38	47 15.9	16	2.2	1.30			50178		SVS 6473	171	25	2.3
1110	7 20 38	62 31.0	62	2.3	.10	-.95				VZ CAN	131	28	5.6
1111	7 20 56	-25 41.0	10	2.3	-3.06	-5.90	-7.62	-30087		VY CAN	219	5	1.1
1112	7 21 26	-27 44.6	14	4.4	1.26			-30090	2822		241	6	1.1
1113	7 22 27	-21 25.2	14	4.1	1.36						236	3	1.1
1114	7 22 44	27 54.1	10	1.8	1.37	.77		30183	2821	107 GEM	191	19	3.3
1115	7 22 52	6 10.7	15	3.5	1.59						211	10	1.1
1116	7 22 53	65 51.9	25	1.3		-1.77					120	28	2.5
1117	7 23 1	33 27.7	11	1.7	1.24		-2.56	30184			185	21	2.3
1118	7 23 12	-5 45.2	9	2.2	1.10		-2.87	-10163		TT MOI	222	5	2.2
1119	7 23 48	12 47.8	16	3.2	1.77						205	13	1.1
1120	7 24 40	46 5.8	11	1.4	.75	-1.59		50180		Y LYN	172	25	3.3

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	B	I	N
	H M S	O .	S								O			
1121	7 24 41	75 11.0	42	2.5	1.65			80017		WZ CAM	140	29		2.6
1122	7 24 54	41 3.9	12	1.2	1.17			40177		VX AUR	178	24		3.3
1123	7 25 2	48 2.2	14	1.5	1.00			50181		SVS 100869	170	26		2.3
1124	7 25 4	-26 18.8	14	3.9	1.37						240	5		1.1
1125	7 25 20	-26 46.5	10	2.3		-1.80	-2.58				241	5		1.1
1126	7 25 24	68 33.2	25	2.1	1.88			70076	2830		147	29		3.5
1127	7 25 30	9 1.5	10	2.3	.59	-1.86		10164	2854	GAM CMI	209	12		1.1
1128	7 25 50	0 53.7	14	3.5	1.77	-2.58					216	9		1.1
1129	7 26 37	-10 15.1	14	3.7	1.36						216			1.2
1130	7 26 51	28 1.5	13	2.2	1.39			30186	2861	65 GEM	R 151	20		2.3
1131	7 26 55	-19 20.8	14	4.3	.78	-1.12		-20131			234	1		1.1
1132	7 27 6	-7 1.8	15	3.2	1.63						R 224	5		1.2
1133	7 27 12	50 7.9	13	1.3	1.30		-2.29	50182		SVS 100875	168	27		4.4
1134	7 27 58	51 53.1	15	1.9	1.28					U MON	166	27		2.4
1135	7 28 17	-9 39.0	16	4.1	*	-1.49					226	4		1.2
1136	7 28 17	20 37.4	10	2.2	.90	.08		20101		DO 13079	198	18		1.2
1137	7 28 49	18 21.6	17	2.6		-3.29				N 2406	201	17		1.2
1138	7 30 1	8 26.3	9	2.3	2.00	-1.58		10167		S CMI	210	13		1.1
1139	7 30 35	11 8.9	16	3.2	1.53			10168		DO 4247	208	14		1.1
1140	7 30 35	-20 34.9	10	2.3	.55	-1.74		-20133		Z PUP	216	1		1.1
1141	7 30 46	30 37.8	10	1.4	.73	-1.85		30187			189	22		3.3
1142	7 31 5	67 33.5	29	2.3	1.80		-2.61	70077		DO 31647	148	29		2.5
1143	7 31 11	66 37.0	23	1.7	1.50			70078		DO 31652	120	29		3.5
1144	7 31 23	31 58.9	9	1.4	1.13		-2.88	30186	2891	ALF GEM	187	22		3.3
1145	7 31 26	-14 22.0	10	2.5	.37	-2.88		-10169	2902		231	3		1.1
1146	7 31 34	-9 58.4	16	4.1	1.34						227	5		1.1
1147	7 31 55	5 47.6	15	3.5	1.57						213	12		1.1
1148	7 31 59	37 9.8	14	1.8	1.29						182	24		2.3
1149	7 32 43	48 10.3	16	1.4		-2.88	-3.76			UPS GEM	.70	27		2.3
1150	7 32 58	27 2.3	13	2.0	.19	-1.17		30190	2905		193	21		2.2
1151	7 33 2	-23 53.5	15	3.9	.88	-1.65		-20134		DU PUP	239	2		1.1
1152	7 33 8	65 40.9	26	2.1	1.31	.16	-4.12			N 2403	151	29		2.5
1153	7 34 52	29 17.7	19	2.9	1.69						190	22		1.2
1154	7 35 0	8 44.5	16	3.2	2.05						210	14		1.1
1155	7 35 26	73 22.3	35	1.9		-1.22	-2.73				142	29		2.6
1156	7 35 28	13 46.2	16	3.2	1.71		-2.69				206	16		1.1
1157	7 35 31	13 12.0	16	3.2	2.01						206	16		1.1
1158	7 35 58	-7 32.8	15	3.3	1.41						225	7		1.2
1159	7 36 42	-8 21.1	16	4.0		-3.50					226	7		1.1
1160	7 36 47	38 27.9	10	1.4	1.26	-2.29		40183	2935	DO 13215	181	25		3.3

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	H M S		O ' S											
1161	7 36 49	5 19 8	15	3.5	.79			10170	2943	ALF CMI	214	13		1-1
1162	7 37 39	-21 35.9	15	4.0	1.30	.36		20187		Y GEM	218	0		1-1
1163	7 38 9	20 34.0	12	2.0	.91						199	20		2-2
1164	7 38 30	-23 21.0	15	3.9			-4.44				199	0		1-1
1165	7 38 36	-28 23.3	15	4.4		-1.63					244	3		1-1
1166	7 38 50	72 3.2	24	1.1		-2.17					143	30		2-6
1167	7 38 54	13 35.8	11	2.2	1.04			10172	2965	DO 2303	206	17		2-2
1168	7 39 13	14 18.5	9	2.0	.80			10173	2967	SVS 1107	206	18		1-2
1169	7 39 15	-4 5.7	11	2.6	1.34			161			222	9		2-2
1170	7 39 17	8 34.9	16	3.2	1.65						211	15		1-1
1171	7 39 20	-37 20.7	16	3.9	1.35		-4.00				252	7		1-1
1172	7 39 36	25 57.8	17	3.0	1.59						194	22		1-2
1173	7 40 2	-10 46.9	10	2.5	.83			-10175		SU MON	229	6		1-1
1174	7 40 7	29 1.1	13	2.0	1.49			30191	2973	SIG GEM	191	23		2-2
1175	7 40 47	38 58.6	11	1.5	1.39			40184		DO 13256	181	26		3-3
1176	7 40 59	25 54.2	12	2.2	1.32			30193	2983	76 GEM	194	22		2-2
1177	7 41 9	-2 9.4	11	2.4			-2.86			V471 MON	221	11		2-2
1178	7 41 27	24 29.6	13	2.0	1.11	.98		20188	2985	KAP GEM	196	22		2-2
1179	7 41 33	-28 17.6	15	4.4	.71			-30098	2993	1 PUP	244	2		1-1
1180	7 41 44	-19 26.4	14	4.2	1.46						236	2		1-1
1181	7 41 45	-28 50.3	16	4.1	.25			-30099	2996	3 PUP	244	3		1-1
1182	7 42 0	26 45.1	10	2.3		-2.25					194	23		1-2
1183	7 42 19	28 8.2	10	1.1	.39	-1.50	-2.99	30194	2930	BET GEM	192	23		2-2
1184	7 42 20	30 54.4	10	1.7	1.47	.73		30195		AU GEM	189	24		2-2
1185	7 43 2	3 42.9	15	3.2	1.35						216	14		1-1
1186	7 43 2	18 39.8	10	1.7	1.19	.27		20189	3003	81 GEM	202	20		2-2
1187	7 43 16	37 39.6	10	1.5	.82			40186	2999	DO 13275	192	26		3-3
1188	7 44 0	-5 28.4	16	4.1			-3.03				224	10		1-2
1189	7 44 5	25 31.8	17	3.0	1.37						195	23		1-2
1190	7 44 8	-3 11.3	16	3.0			-3.11				222	11		1-2
1191	7 44 11	33 31.3	14	1.8	.84			30196	3013	PI GEM	187	26		2-2
1192	7 44 24	-26 9.1	16	3.9	.89	-1.56					242	1		1-1
1193	7 46 15	-15 49.0	16	4.0			-2.92				234	5		1-1
1194	7 46 26	10 53.9	16	3.2	1.31						210	18		1-2
1195	7 47 7	-24 41.8	16	4.0	.33	-1.57		-20145	3045	X1 PUP	241	1		1-1
1196	7 47 36	15 31.0	9	2.1			-2.53				204	20		1-2
1197	7 48 10	37 39.6	20	2.4						N 2454	193	27		1-2
1198	7 48 43	-34 48.6	11	2.3		-1.35	-3.46				250	14		1-1
1199	7 48 44	-2 32.1	11	2.5	.87			162			222	12		2-2
1200	7 49 28	3 24.5	11	2.4	.64			163	3061	DO 2341	217	15		2-2

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	H	M	S	O	S						O				
1201	7 50 29	60 4.0	25	2.5							157	31			2-4
1202	7 50 59	47 40.8	14	1.6	1.70	-2.29	-2.82	50186	3065	26 LYN	172	30			2-4
1203	7 51 35	-28 49.4	15	4.0	1.38						245	-1			1-1
1204	7 51 51	-26 12.7	16	3.8	-0.01			-30103			243	1			1-1
1205	7 52 11	74 9.6	33	2.3		-2.22				EO	141	31			2-6
1206	7 52 18	30 37.7	19	2.6	1.51						190	26			1-2
1207	7 52 44	-6 16.6	15	3.9	1.61						226	11			1-1
1208	7 52 56	20 6.3	17	3.0			-2.83				201	23			1-2
1209	7 52 57	-36 3.0	16	3.9			-2.91				252	-4			1-1
1210	7 53 18	8 59.3	15	3.3		-2.20	-3.06				212	18			1-2
1211	7 53 30	16 54.6	16	3.3	1.25						205	22			1-2
1212	7 53 46	11 2.1	16	2.9		-1.13					210	19			1-2
1213	7 54 35	25 16.0	17	2.7		-2.38				N 2486	196	25			1-2
1214	7 56 9	-0 50.2	16	3.8	1.25		-2.92				222	14			1-2
1215	7 58 27	-12 43.1	16	3.9	1.03	-0.88		-10184		U PUP	232	9			1-1
1216	7 58 36	-1 14.4	16	3.8	.95			166	3141	28 MON	222	15			1-1
1217	7 59 14	1 7.8	16	3.1		-3.74	-2.89				220	16			1-2
1218	7 59 32	2 28.3	11	2.6	1.15			167	3145		219	17			2-2
1219	8 0 13	47 6.1	14	2.0		-1.58		40192		SV LYN	172	31			2-4
1220	8 0 22	36 29.2	14	1.9	.08	-0.96					185	29			2-2
1221	8 0 46	-5 32.5	15	3.9		.62	-3.02				226	13			1-1
1222	8 1 23	62 16.7	24	2.3			-3.08				155	32			2-4
1223	8 1 53	-31 21.7	16	4.0				-30114			249	-0			1-1
1224	8 2 10	-32 29.7	16	4.2	1.34			-30115	3170		250	-1			1-1
1225	8 2 38	34 16.4	20	2.6	.14		-2.57				187	29			1-2
1226	8 3 1	26 17.3	17	3.1		-1.79				1 0492	196	27			1-2
1227	8 3 22	22 46.6	12	1.9	1.11			20195	3169	9 CNC	200	26			2-2
1228	8 3 23	5 43.9	8	2.0	1.61			10182			216	19			2-3
1229	8 3 31	60 52.0	23	1.5	1.57			60185		DO 32087	155	33			2-4
1230	8 3 34	-0 32.1	16	3.9	1.71						222	16			1-1
1231	8 5 31	-20 31.6	10	2.4	1.17			-20158		BG PUP	240	6			1-1
1232	8 6 4	65 22.1	19	1.6	.54	.55		70082		RZ UMA	151	33			4-4
1233	8 8 24	19 17.2	17	3.0	1.00	.52		20197		VV CNC	204	26			1-2
1234	8 8 51	3 39.3	16	3.2	1.15						219	19			1-2
1235	8 9 3	-32 44.7	16	4.1	.88		-3.00				251	0			1-1
1236	8 9 51	2 2.5	16	3.8	1.95	.53				EO	221	19			1-1
1237	8 10 34	-32 40.0	16	4.1	1.30						251	1			1-1
1238	8 11 20	20 29.4	12	2.0	1.51						203	27			2-3
1239	8 11 33	-28 .9	15	4.2			-3.81				247	3			1-1
1240	8 11 58	24 53.5	13	2.0	.96			20198		RX CNC	198	29			2-2

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	H M S	O	S								O	O	
1241	8 13 44	11 52.7	9	1.8	-1.28	-2.36	-2.99	10185	3248	R CNC	212	24	3-3
1242	8 15 22	85 16.8	165	4.6	2.06	-.67				FF CEP	128	29	3-7
1243	8 17 23	2 54.3	11	2.3	.87			172		RY HVA	221	21	2-2
1244	8 18 56	5 5.7	11	2.2	.05	-.86		10187		FZ HVA	219	22	2-2
1245	8 19 30	43 20.5	14	1.6	.15			40195	3275	31 LYI.	177	34	2-3
1246	8 19 36	33 40.0	13	1.6	1.48					T LYI.	189	33	2-3
1247	8 19 40	15 8.0	8	1.5	.64	-.77		20199		Z CNC	209	27	3-2
1248	8 20 58	1 33.1	15	3.0	1.49						223	21	1-2
1249	8 22 0	52 27.3	19	1.5	1.24			50191		DO 32264	166	35	2-3
1250	8 22 9	-8 22.9	16	3.4	-.23	-1.79		-10194		FK HVA	232	15	1-1
1251	8 22 18	28 5.5	13	2.2		-.97				SVS 100954	195	32	2-3
1252	8 23 13	44 57.1	13	1.6		-.89					176	35	2-3
1253	8 23 40	-4 45.3	10	2.5	-.22	-.98		175		R	229	18	1-1
1254	8 23 44	3 53.0	16	3.5	1.21						221	23	1-2
1255	8 23 59	12 48.5	8	1.7	.60	-.95		10189	3319	27 CNC	212	27	3-3
1256	8 24 35	13 9.0	11	2.2		-.3.59					212	27	2-3
1257	8 24 48	-27 35.5	10	2.4		-2.16					238	6	1-1
1258	8 26 57	-6 7.7	10	2.3		-1.24				RT HVA	230	18	1-1
1259	8 27 3	2 51.8	15	3.1		-3.21					222	23	1-2
1260	8 27 45	-21 17.6	16	3.8	1.50						244	10	1-1
1261	8 28 8	9 18.4	15	3.4		-1.42					216	26	1-2
1262	8 28 41	18 15.9	12	1.9	1.27			20200	3357	THET CNC	207	30	2-3
1263	8 28 53	-22 36.5	16	3.7		-1.71					245	10	1-1
1264	8 29 4	24 11.8	12	1.9		-.40				I 0509	200	32	2-3
1265	8 29 40	67 21.3	23	1.4	1.37			70085		DO 32354	148	35	3-4
1266	8 29 42	-28 52.4	16	3.9	1.36	-1.87				EO	250	6	1-1
1267	8 30 44	70 19.0	23	1.4	1.02						145	34	2-6
1268	8 30 45	-13 11.5	16	3.7		-2.56				DO 32357	237	15	1-1
1269	8 31 30	4 7.4	16	3.4	.08						222	25	1-2
1270	8 33 1	9 44.7	15	3.4		-1.01					216	27	1-2
1271	8 34 30	-17 45.5	16	3.7	.89			-20171		W PYX	242	14	1-1
1272	8 34 39	19 49.5	10	2.0	1.46	-1.24	-2.29			N 2625	205	32	2-3
1273	8 34 41	-8 39.4	16	3.4	1.54						234	19	1-1
1274	8 35 52	-10 16.7	15	3.8	1.25	-1.35				A	235	18	1-1
1275	8 36 2	11 11.6	16	3.1	1.45						215	29	1-2
1276	8 36 6	3 20.8	11	2.3	1.22						223	25	2-2
1277	8 36 19	64 31.9	24	1.5	1.27					SIG HVA	151	36	2-4
1278	8 36 23	-3 59.2	16	3.4	1.35			60188	3403	PIZ URA	230	22	1-2
1279	8 37 8	-23 55.6	16	3.7	1.45						247	10	1-1
1280	8 37 18	-9 24.7	10	2.3	.17			-10199		RV HVA	235	19	1-1

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L 11	B 11	N
	H M S	O	S										
1281	8 37 30	-17 5.6	16	3.8	-68	-1.78		-20173		AK IYA DO 2576	241	15	1-1
1282	8 38 23	-0 33.6	8	2.1	1.47			177			227	24	2-2
1283	8 39 6	2 21.7	11	2.5	1.57	-1.50					224	25	2-2
1284	8 39 42	45 59.4	16	2.3			-4.91			R	174	38	2-3
1285	8 41 45	18 19.9	10	1.6	1.33			20205	3461	DEL CNC	208	33	3-3
1286	8 43 31	79 9.8	31	1.0	1.22	-83		80018		RS CAM	134	32	3-6
1287	8 43 35	28 56.9	10	1.5	1.69			30701	3475	101 CNC	196	37	3-3
1288	8 43 44	1 49.5	9	1.9	-31	-1.71		179		EY HYA	225	26	2-2
1289	8 44 6	6 35.7	15	3.4	1.16			10193	3482	EPS HYA	221	29	1-2
1290	8 44 28	1 18.1	15	3.1		-1.11					226	26	1-2
1291	8 44 41	78 21.5	42	1.9	.93			80019		DO 32450	135	33	4-6
1292	8 45 54	18 13.2	16	2.6			-2.66				209	34	1-2
1293	8 46 2	12 42.0	16	3.1	1.34			10194		DO 2615	215	32	1-2
1294	8 46 42	73 16.5	36	2.9	1.43	-73	-3.42				141	34	2-6
1295	8 47 41	40 14.0	15	1.8	1.66						182	39	2-3
1296	8 49 24	28 26.1	10	1.7	1.11			30202	3521	53 CNC	197	38	3-3
1297	8 51 22	-12 51.5	16	3.4			-3.10				240	20	1-1
1298	8 52 34	17 25.4	11	2.2	-51	-84		20206	3541	X CNC	210	35	2-2
1299	8 52 40	6 7.8	11	2.4	.61			10196	3547	ZET HYA	222	30	2-2
1300	8 53 31	-19 2.8	16	3.5	.96			-20176			245	16	1-1
1301	8 53 40	20 2.3	12	2.1	.03	-1.37		20207		T CNC	207	36	2-2
1302	8 55 28	11 1.8	10	2.0	-26	-1.16	-2.85	10199		RT CNC	218	33	2-2
1303	8 56 9	77 9.6	49	2.4		-1.35	-4.83				136	34	2-6
1304	8 57 57	67 50.5	19	1.3	.18	-67		70087	3576	RHO UMA	147	37	4-4
1305	8 59 1	4 35.3	16	2.9	1.50						225	31	1-2
1306	9 0 9	-20 50.6	16	3.6	1.47		-3.65				248	17	1-1
1307	9 0 31	38 57.0	11	1.3	.12	.63		40201		DO 13765	194	42	3-3
1308	9 1 11	60 29.0	20	1.9	1.47			60190		TT UMA	155	40	3-3
1309	9 1 22	9 4.2	15	3.2	1.39						220	33	1-2
1310	9 2 18	64 58.5	20	1.6	1.41			60191		SVS 5677	150	39	3-3
1311	9 2 20	12 53.5	16	3.3		-69					216	35	1-2
1312	9 2 30	-5 56.2	15	3.7	1.33						235	26	1-2
1313	9 2 32	-7 6.2	16	3.3	.73						237	25	1-2
1314	9 3 5	38 38.7	13	1.5	1.66			40202	3612		184	42	2-3
1315	9 3 39	-9 43.6	16	3.3	1.37						239	24	1-2
1316	9 3 49	67 3.8	23	1.5	1.04			70088	3609	SIG1 UMA	147	36	3-3
1317	9 4 25	1 41.1	11	2.2	1.24	-1.64		183	3618	DO 2701	228	31	2-2
1318	9 4 35	-8 36.6	16	3.2							238	25	1-2
1319	9 4 50	-15 30.8	15	3.8	1.57			70089			244	21	1-1
1320	9 4 59	69 24.7	25	1.6	1.26					DO 32697	144	37	3-5



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	H M S	O	S										
1321	9 5 45	13 24.8	9	2.0	-1.29	-1.40		10203		DO 13805	216	36	2-2
1322	9 6 38	3 34.2	15	3.2		-1.42					227	32	1-2
1323	9 6 51	25 27.0	13	2.0	.33	-1.03	-2.76	30208		W CNC	202	41	2-2
1324	9 7 17	6 39.2	11	2.4	2.43	-.66				H 2748	224	34	2-2
1325	9 7 18	76 44.5	42	1.9		-1.40					136	34	2-6
1326	9 7 36	31 10.2	8	1.3	-1.93	-2.88	-3.40	30209	3639	AS CNC	194	42	3-3
1327	9 7 44	-6 5.0	15	3.6	1.72		-3.80				236	27	1-2
1328	9 8 14	75 49.4	49	2.6							137	35	2-6
1329	9 8 37	19 11.2	16	2.7	1.50					DO 13439	210	39	1-2
1330	9 11 28	72 53.7	42	4.0		-1.69					140	36	2-6
1331	9 11 46	0 48.9	10	2.5		-.82	-2.99				230	32	2-2
1332	9 12 16	56 56.5	13	1.4	1.28			60192	3660	17 UMA	150	42	3-3
1333	9 12 28	9 49.2	16	3.6		-.56					221	36	1-2
1334	9 12 34	-1 40.5	15	3.0	1.03						233	30	1-2
1335	9 12 39	-3 46.9	11	2.2	1.38			185		DO 2727	235	29	2-2
1336	9 12 46	51 38.2	17	1.8		-.91	-2.60				167	43	2-3
1337	9 14 10	37 38.0	14	1.7			-2.53				196	44	2-3
1338	9 15 48	5 57.1	15	3.3	1.54						226	35	1-2
1339	9 17 41	3 12.4	15	3.3			-2.76				229	34	1-2
1340	9 17 57	6 55.0	15	3.3			-3.06				225	36	1-2
1341	9 18 0	34 36.5	10	1.4	-.83	-1.23	-2.05	30210	3705	ALF LYN	190	45	3-3
1342	9 18 3	0 22.5	10	2.5	1.15			186		DO 2743	232	53	2-2
1343	9 18 10	-9 30.0	16	3.3		-1.09	-3.40	-10215	3709	27 HVA	241	27	1-2
1344	9 18 18	56 55.5	16	1.4	.24	-.48		60193	3698	SVS 1434	159	43	3-3
1345	9 19 29	41 40.5	15	1.6		-.65					190	45	2-3
1346	9 19 46	-6 33.9	14	3.5	1.23						239	29	1-2
1347	9 20 29	31 58.2	17	2.1	1.44						194	45	1-2
1348	9 20 45	7 55.2	11	2.1	1.10			10205		DO 2756	224	37	2-2
1349	9 20 48	21 35.3	16	2.7			-3.04				208	43	1-2
1350	9 21 18	64 8.8	23	1.3	1.51			60194	3722		150	41	2-3
1351	9 21 53	26 22.7	10	1.8	1.21			30211	3731	KAP LEO	202	44	2-2
1352	9 23 41	21 1.4	18	3.3		-.92					209	43	1-2
1353	9 25 6	-8 28.3	11	2.1	-1.42	-1.27		-10217	3748	ALF HVA	242	29	2-2
1354	9 25 37	36 23.3	14	1.8	-.94			40205		RS LMI	198	46	2-2
1355	9 28 1	44 54.2	10	1.5	1.60	-.66		40206		DO 32882	175	47	3-3
1356	9 28 13	15 55.0	17	3.2		-1.66	-3.60			EO	216	42	1-2
1357	9 28 24	35 19.4	13	2.0	1.00			40207	3769	8 LMI	199	47	2-2
1358	9 28 51	23 11.7	13	2.0	.20	-.39		20211	3773	LAM LEO	207	45	2-2
1359	9 29 31	-7 27.6	16	3.2	1.19						241	31	1-2
1360	9 29 46	70 2.7	30	2.3	1.64			70090	3771	24 UMA	R 143	39	3-4

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	H M S	O	S								O		O		
1361	9 30 0	67 8.1	32	2.4		-1.21	-3.13				146	40	2-4		
1362	9 30 37	17 3.0	17	3.5	1.51					EO	215	43	1-2		
1363	9 31 2	81 34.6	50	1.7	.72	-.85			3751	DO 32868	131	33	5-7		
1364	9 31 8	-9 3.9	16	3.2	1.25						243	30	1-2		
1365	9 32 27	-9 23.7	16	3.2	.85	-1.53					244	30	1-2		
1366	9 33 46	31 23.7	11	1.8	1.21	-.51		30213	3820		195	48	2-2		
1367	9 34 53	11 55.0	16	3.5	-.93						222	42	1-2		
1368	9 36 59	78 5.1	53	2.5	1.45	-.59	-2.86			Y DRA	134	35	3-7		
1369	9 37 29	-0 54.9	11	2.3	.77	-1.04		190	3845	107 HVA	237	36	2-2		
1370	9 38 11	19 27.0	16	2.8		-3.01					213	46	1-2		
1371	9 38 55	31 30.7	13	1.9	1.36			30214	3850	PSI LEO	195	49	2-2		
1372	9 41 6	14 15.9	12	2.2	1.02		-3.08	10211	3866		220	44	2-2		
1373	9 41 34	46 17.6	20	2.5	1.60						173	49	1-2		
1374	9 42 2	69 43.1	32	2.5	1.77	-.90					142	40	2-5		
1375	9 42 14	18 1.7	12	2.3		-.60					215	46	2-2		
1376	9 42 28	34 41.0	14	1.8	-1.31	-2.70	-3.21	30215		R LMI	191	50	2-2		
1377	9 42 55	16 16.7	11	2.4		-.50				EO	218	46	2-2		
1378	9 43 3	57 19.7	15	1.3	.09	-.65		60197	3870	SVS 1495	157	46	2-2		
1379	9 43 34	6 56.1	15	3.7	.75		-5.11	10213	3876	DO 2819	229	42	1-2		
1380	9 44 48	11 39.4	10	2.1	-3.05	-4.21		10215	3882	R LEO	224	44	2-2		
1381	9 45 11	13 30.7	13	2.8	-3.50	<-6.04	<-8.45	10216		EO	221	45	2-2		
1382	9 47 56	2 23.7	14	3.3	1.47						235	40	1-2		
1383	9 48 10	16 13.7	15	3.0	1.37						218	47	1-2		
1384	9 48 46	0 2.1	14	3.4	1.11		-3.66				248	39	1-2		
1385	9 49 13	35 28.2	19	2.5		-1.15					190	51	1-2		
1386	9 50 0	26 15.1	10	2.0	.90	-1.03		30218	3905	MU LEO	204	50	2-2		
1387	9 51 8	6 10.6	10	2.5	1.06		-3.23	10218	3915	DO 2848	231	43	2-2		
1388	9 52 10	69 54.7	23	1.8		-.15				R	141	41	3-5		
1389	9 52 40	-18 41.6	14	3.3	.66			-20201	3923	N 3034	255	27	1-1		
1390	9 52 55	58 27.6	26	2.0	1.31						155	47	1-2		
1391	9 53 9	55 31.4	27	1.8	1.25						159	48	1-2		
1392	9 53 40	16 56.7	15	3.0	1.60		-3.47				218	48	1-2		
1393	10 0 32	20 57.3	19	3.7							213	51	1-2		
1394	10 1 6	45 8.3	20	2.7	1.48						174	52	1-1		
1395	10 1 55	-2 39.7	15	3.6		-1.13					243	40	1-1		
1396	10 2 14	4 50.0	16	3.4	1.86	-.64				EO	235	44	1-1		
1397	10 2 25	74 25.3	49	3.0	1.51		-3.43				136	38	2-6		
1398	10 5 9	10 58.3	17	3.7				10225	3980	31 LEO	228	48	1-2		
1399	10 5 16	10 15.5	9	1.9	.57	.03					229	48	2-2		
1400	10 9 8	70 35.9	34	1.5	1.73						140	41	2-5		

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	I	B	I	N
	M	S		S											
1401	10 10 57	59 39.8	21	1.7	1.58			60201		DO 33211	152	48			2-3
1402	10 11 24	56 36.5	19	2.1	.95	-.28		60202		OO 33214	156	50			2-3
1403	10 13 3	30 49.5	17	2.4	.30	-5.04	-4.75	30219		RW LNI	EO	R			1-1
1404	10 13 42	23 37.9	17	2.9	1.87			20218	4031		210	55			1-2
1405	10 14 14	14 9	17	3.9	.96			10228	4035	37 LEO	225	52			1-1
1406	10 14 36	-14 24.0	13	3.8	-1.06	-2.92	-3.45	-10236			256	34			1-1
1407	10 15 46	70 37.2	34	1.5			-2.67				139	42			2-5
1408	10 16 11	18 50.3	19	3.7			-2.69				218	54			1-2
1409	10 16 34	21 30.0	19	3.8	1.68		-3.80				214	55			1-2
1410	10 17 15	20 5.3	12	2.4	-.92	-1.24		20219	4057	GAM LEO	217	55			2-2
1411	10 19 13	41 45.0	14	1.4	-.60	-1.53	-2.84	40218	4069	MU UMA	179	56			2-2
1412	10 19 17	21 46.1	11	2.1	2.05					N 3221	214	56			2-2
1413	10 19 38	64 46.4	24	1.7	1.87	-1.13					R	145	46		2-4
1414	10 20 27	79 52.9	60	2.6		-1.05	-3.29				130	35			2-7
1415	10 23 38	75 18.3	35	2.7	1.66	-2.88					134	39			3-6
1416	10 23 43	-15 33.1	13	3.8	.15	-.35	-4.57	-20210	4094	MU HYA	260	34			1-1
1417	10 24 22	5 52.9	15	3.9			-3.51				238	49			1-1
1418	10 27 42	75 9.0	34	3.3	1.23	-1.54					134	39			2-6
1419	10 29 36	14 24.7	17	3.9	.60			10231	4127	L LEO	228	55			1-1
1420	10 29 44	76 26.1	68	4.5	1.76	-1.25					133	38			2-6
1421	10 29 45	44 7.5	22	2.5	1.52	-.46	-2.46				173	58			1-2
1422	10 30 34	74 1.0	38	1.9	2.02					N 3252	135	40			2-5
1423	10 30 37	70 1.4	23	1.8	.96	-1.08	-3.27	70095		SVS 6789	138	43			4-4
1424	10 30 47	-7 12.9	14	3.6	1.80	-1.81					254	42			1-1
1425	10 32 33	14 37.5	17	4.0	1.78						228	56			1-1
1426	10 34 31	-3 47.6	14	3.6			-4.62				222	45			1-1
1427	10 35 9	-13 6.1	13	3.5	-1.37	-2.01	-2.80	-10242	4163	U HYA	260	38			1-1
1428	10 35 16	-11 46.8	13	3.4	.07	-1.14		-10243		FF HYA	259	39			1-1
1429	10 37 7	72 54.2	40	2.6		-.40	-2.55				135	41			2-5
1430	10 37 13	-22 3.7	13	3.5			-3.70				267	31			1-1
1431	10 39 42	69 21.0	22	1.8	1.31	-.96		70098	4181		138	44			4-4
1432	10 41 14	69 3.6	23	1.9	.75	-1.25	-3.03	70099		R UMA	138	44			3-4
1433	10 41 46	67 41.8	16	1.1	.15	-.66		70100	4195	VY UMA	140	45			4-4
1434	10 42 28	-6 35.2	13	3.9	1.13	-.28		-10245			256	44			1-1
1435	10 42 46	52 31.1	17	1.5		-.67	-1.89			BH UMA	157	56			2-2
1436	10 44 24	78 3.1	56	2.7	1.54	-1.08	-2.56			EO	130	37			3-5
1437	10 46 11	8 56.8	16	4.1	1.33	-.22		10233		VV LEO	240	56			1-1
1438	10 47 7	-15 54.9	8	2.0	.00	-2.04	-2.87	-20217	4232	MU HYA	265	38			1-1
1439	10 49 12	-20 59.6	8	2.0	.58	-3.57	-3.98	-20218		V HYA	269	34			1-1
1440	10 50 28	34 29.8	19	2.3	1.00			30226	4247	46 LMI	190	64			1-1

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	H	M	S								O				
											O				
1441	10 50 59	14 .1	14	3.4	1.06	- .99		10234		W LEO	2.3			59	1.1
1442	10 51 13	77 19.8	35	1.2	1.75			80021		DO 33481	1.1			38	3.5
1443	10 52 1	72 8.7	34	2.6	1.33	- .12		70102		VX UMA	.35			42	3.3
1444	10 52 19	33 33.1	19	2.3			-4.38				192			64	1.1
1445	10 52 38	22 24.6	9	2.1			-2.90				217			63	1.1
1446	10 53 19	6 25.5	11	2.6	-1.13	-1.48		10235	4267	VY LEO	245			55	1.1
1447	10 53 34	74 24.6	47	3.2		-1.44					133			41	2.4
1448	10 53 48	74 35.6	35	2.1	.55			70103		DO 33498	133			41	3.4
1449	10 55 54	70 16.9	31	1.3	1.27			70104		VW UMA	136			44	2.3
1450	10 58 7	-18 3.4	12	3.5	-1.69	-3.24	-3.52	-20222		R CRT	269			37	1.1
1451	10 59 1	73 8.2	38	2.3			-3.20				133			42	2.3
1452	10 59 20	-2 11.4	14	3.8	.68			200	4299	G1 LEO	257			50	1.1
1453	10 59 27	46 36.1	22	2.8	1.46						164			61	1.1
1454	11 0 31	61 59.7	17	2.0	- .95	- .94		60208	4301	ALF UMA	143			51	1.2
1455	11 1 4	-2 56.7	10	2.4	.77			201		SX LEO	258			50	1.1
1456	11 2 46	72 57.4	36	2.5	2.24	-1.20	-2.66				133			42	2.3
1457	11 4 31	49 27.4	23	2.2	1.19			50208		DO 33583	158			60	1.1
1458	11 4 53	-11 11.7	13	3.7		- .72					266			44	1.1
1459	11 5 7	77 38.7	59	4.1		- .94	-3.01				130			38	2.5
1460	11 6 30	44 46.8	21	2.7	.14			40224	4335	PSI UMA	166			63	1.1
1461	11 6 39	31 26.2	19	2.5	1.18						197			67	1.1
1462	11 6 40	36 34.1	19	2.6	.37	- .37		40222	4333		124			67	1.1
1463	11 6 46	43 29.4	11	2.0	1.18			40223	4336	DO 33591	168			64	1.1
1464	11 6 53	0 17.4	14	4.1		-3.46				I 0673	257			53	1.1
1465	11 7 0	31 7.6	18	2.5	1.46						197			67	1.1
1466	11 7 53	1 18.6	14	4.0		- .86					256			54	1.1
1467	11 8 50	80 25.8	77	3.5	2.01						128			36	2.5
1468	11 9 46	28 49.2	18	2.8	1.64	- .23					203			68	1.1
1469	11 11 21	-8 43.6	13	3.8		- .99					266			47	1.1
1470	11 11 50	27 10.0	18	2.4	1.47						208			68	1.1
1471	11 12 13	76 37.0	67	4.6	1.02	-1.59					130			39	2.5
1472	11 12 19	85 6.0	257	8.3							125			32	2.6
1473	11 12 28	23 22.2	17	2.8	- .25			20227	4362	72 LEO	218			68	1.1
1474	11 12 40	75 23.7	26	1.7	.36	-1.33	-2.08	80023		SVS 6827	131			41	4.4
1475	11 15 46	33 22.0	19	2.4	.13			30230	4377	NU UMA	191			69	1.1
1476	11 16 27	-30 10.0	11	3.6	1.02			-30174			290			28	1.1
1477	11 16 47	-14 32.8	12	4.0	.57			-10253	4382	DEL CRT	272			42	1.1
1478	11 18 32	4 33.7	15	4.1		- .76					256			59	1.2
1479	11 19 59	43 44.6	10	1.9	1.64			40225	4392	56 UMA	165			66	1.1
1480	11 20 25	76 4.5	54	4.4	1.03	-1.68	-3.62				130			40	2.5

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	JRC	BS	COMMENTS	L	B	I	M
	H	M	S											
1481	11 20 29	24 24.3	17	2.8							217	70		1-1
1482	11 21 27	-19 36.6	8	2.1	.62	-1.67	-2.07	-20227		T CRT	276	38		1-1
1483	11 22 7	-10 36.0	12	4.0	.50			-10254	4402	EPS CRT	271	47		1-1
1484	11 22 27	16 29.8	16	3.3	1.51						237	67		1-1
1485	11 22 47	84 .4	115	3.1		-1.21					126	33		2-6
1486	11 23 2	-12 14.1	12	3.6	-.79						272	45		1-1
1487	11 24 46	9 30.1	9	2.2		-.85	-3.02			1 2811	251	63		1-1
1488	11 25 10	15 25.0	9	2.3	.81	-.39		20229		AF LEO	240	67		1-1
1489	11 25 21	45 28.5	20	2.5	.13			50211		ST UMA	160	65		1-1
1490	11 25 47	24 7.3	17	2.7	1.69						218	71		1-1
1491	11 26 9	1 42.1	16	3.1	1.54						262	58		1-2
1492	11 27 47	-2 43.9	10	2.3	.91			206	4432	87 LEO	257	54		1-1
1493	11 27 57	-22 21.1	11	3.5		-2.69					220	37		1-1
1494	11 28 25	69 35.0	30	2.0	-.13			70107	4434	LAM DRA	133	46		2-2
1495	11 29 13	-12 5.3	8	2.0	.91	-1.02		-10256		RR CRT	274	46		1-1
1496	11 29 56	5 22.4	14	4.2			-2.43				259	61		1-2
1497	11 30 19	-30 50.9	11	3.5	.89			-30177	4449		284	29		1-1
1498	11 32 28	19 27.2	17	3.0	1.73						233	71		1-1
1499	11 32 57	35 9.6	10	2.1	-.48	-1.53		40226		DO 14449	183	72		1-1
1500	11 34 11	77 51.1	59	2.5	1.69			80024		DO 33752	128	39		2-5
1501	11 35 19	2 57.1	14	4.1	.40						264	60		1-2
1502	11 35 55	8 25.3	16	3.2	-.13			10243	4483	OME VIM	257	64		1-1
1503	11 37 17	-16 20.4	11	3.9	1.00			-20230	4491		279	43		1-1
1504	11 37 37	16 13.5	16	3.3	1.61						243	70		1-1
1505	11 38 28	26 19.2	17	3.0	1.24						213	74		1-1
1506	11 39 20	55 27.1	20	1.7	1.46			60211	4500		142	59		2-2
1507	11 42 17	53 45.9	23	2.0	1.74						143	61		1-2
1508	11 43 6	36 11.7	18	2.6	.54			40227		TV UMA	177	74		1-1
1509	11 43 13	6 48.9	16	3.5	-.13			10245	4517	HU VIR	263	64		1-1
1510	11 43 23	48 3.1	24	2.5	.93			50213	4518	CHI UM?	150	66		1-1
1511	11 44 32	43 45.5	10	2.0	.34	-1.19	-2.69	40228		AZ UMA	157	69		1-1
1512	11 46 20	-26 25.6	10	3.2	-.61			-30182	4532		296	34		1-1
1513	11 46 41	-3 2.4	10	2.5	1.52			211		90 3152	274	56		2-2
1514	11 46 50	3 46.8	10	2.4	1.73						268	62		1-2
1515	11 47 23	-27 17.6	10	3.2	.91			-30183			297	33		1-1
1516	11 48 36	-10 56.1	8	2.0	-.35	-.85		-10258		RU CRT	280	49		1-1
1517	11 50 44	86 28.0	264	7.4	1.21	-.71	-2.86			SVS 101227	124	31		3-6
1518	11 52 18	-17 39.9	10	3.7							284	43		1-1
1519	11 53 35	58 10.9	16	1.2	1.18	-.91		60213		2 UMA	137	58		2-2
1520	11 53 36	-29 17.3	10	3.4			-2.62				289	32		1-1

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IPC	BS	COMMENTS	L II	B II	N
	H M S	O	S								O	O	
1521	11 54 17	64 5.6	32	2.1	1.55	-2.00					133	52	1-2
1522	11 54 42	49 24.6	24	2.8		-1.04					145	66	1-2
1523	11 56 21	53 .6	18	1.7							140	63	2-2
1524	11 56 57	49 10.4	24	2.8	1.42						144	66	1-2
1525	11 57 15	-13 14.1	10	3.7		-.64					284	47	1-1
1526	11 57 38	81 7.5	66	2.6	1.33				4586	DO 33898	175	36	3-5
1527	11 57 40	19 43.6	17	2.9	.97			20236		DO 14510	243	76	1-1
1528	11 58 22	3 5.6	13	4.1	1.61	-2.36					274	63	1-2
1529	11 59 50	35 37.7	18	2.6			-3.06				172	77	1-1
1530	11 59 52	21 16.4	17	3.0	1.44						239	77	1-1
1531	12 1 16	-52 3.5	7	1.7		-4.25	-6.10	-30187			291	29	1-1
1532	12 1 57	42 58.4	19	1.9	1.47						151	72	1-1
1533	12 3 4	-24 36.2	9	3.4			-3.38				290	37	1-1
1534	12 4 20	19 58.5	17	3.1			-3.14				247	77	1-1
1535	12 4 44	-6 29.0	7	2.3	.08	-1.18		-10263		RW VIR	284	54	2-2
1536	12 7 32	-22 19.6	8	3.5		-3.59		-20233	4630	EPS CRV	291	39	1-1
1537	12 8 9	35 24.5	18	2.5	1.42						168	78	1-1
1538	12 8 58	51 28.9	20	1.8	1.49						138	65	1-2
1539	12 9 55	45 44.1	19	2.0	1.30						143	70	1-2
1540	12 10 0	21 5.4	17	3.0	1.66						246	79	1-1
1541	12 12 10	48 11.3	25	2.8	1.64						140	68	1-2
1542	12 13 31	19 18.9	17	3.1	1.43						255	78	1-1
1543	12 13 35	40 58.6	21	2.4	.94	-.07		40232	4666	2 CVR	149	75	1-2
1544	12 14 41	-31 52.7	7	1.6		-2.66					295	30	1-1
1545	12 17 19	49 17.1	16	1.7	.89	-.87		50217	4690	3 CVN	136	67	2-2
1546	12 19 25	-10 2.5	15	3.5							291	52	1-2
1547	12 20 42	-11 34.1	6	2.0	1.25			-10268			292	50	2-2
1548	12 22 29	44 51.8	22	3.2	-.18						138	72	1-2
1549	12 22 39	1 1.4	9	2.7	-.11	-.95		217		SS VIR	288	63	2-2
1550	12 22 50	57 3.3	13	1.3	1.10			60217	4726	71 UNA	130	60	2-2
1551	12 24 33	25 53.2	10	2.4	1.28			30238	4737	GAM COM	200	64	1-1
1552	12 25 27	55 58.5	17	1.9	1.26			60218	4745	73 UNA	130	61	2-2
1553	12 25 52	-8 23.2	16	3.5	1.51						293	54	1-2
1554	12 27 48	4 42.8	9	2.3	-1.37	-1.98	-2.81	220		BK VIR	290	67	1-1
1555	12 28 13	69 28.5	27	1.5	.17			70113	4765	4 DRA	125	48	2-2
1556	12 28 17	69 54.1	46	2.7	1.38						126	47	1-2
1557	12 30 40	40 32.4	21	2.7	1.47						138	76	1-2
1558	12 31 47	-23 4.0	7	3.2	.55			-20240	4786	BET CRV	298	39	1-1
1559	12 32 7	8 40.2	16	3.5		-2.32					290	71	1-1
1560	12 32 27	71 47.1	37	3.0		-2.35					125	46	1-2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L II	B II	N
	H M S	O'	S								O		
1561	12 32 34	70 17.8	39	2.8	1.62			70114	4795	6 DRA	125	47	2-2
1562	12 33 30	21 .8	17	3.1		-.59					273	83	1-1
1563	12 33 48	5 50.8	16	3.7			-2.44				293	68	1-1
1564	12 34 26	27 21.1	17	2.5	.54	-.89				DO 14615	213	87	1-1
1565	12 34 29	-17 15.8	8	2.5	1.23	-.74				T CRV	298	45	2-2
1566	12 35 45	2 6.2	9	2.6	.65	-.92		221	4807	SVS 101306	295	65	2-2
1567	12 37 13	6 30.4	16	3.7	1.33						295	69	1-1
1568	12 37 20	36 42.6	11	2.1	1.23	-.99					137	80	1-2
1569	12 37 25	0 57.3	10	3.8		-1.25					297	63	1-2
1570	12 37 57	56 6.2	21	2.0	-1.15	-1.98		60220		Y UMA	126	61	2-2
1571	12 39 5	-1 10.2	9	2.6	1.63			223	4825	GAM VIR	298	61	2-2
1572	12 39 42	-13 50.4	8	3.7	1.18						300	49	1-2
1573	12 40 2	1 12.8	16	3.7			-2.72				298	64	1-1
1574	12 40 40	9 31.5	16	3.5	1.26	-.30					296	72	1-1
1575	12 42 41	-6 14.9	15	3.9	.15	-1.32					300	56	1-2
1576	12 42 48	45 43.2	12	1.8	-1.47	-2.02		50219	4846	Y CVN	126	72	2-2
1577	12 43 30	47 58.3	26	3.4			-3.52				126	69	1-2
1578	12 43 46	53 28.0	21	2.0							125	64	1-2
1579	12 44 41	4 24.8	16	3.5		-1.50		224		RU VIR	300	67	1-1
1580	12 46 40	-4 59.1	8	2.5		-2.81				N 4705	302	58	2-2
1581	12 47 7	-14 50.2	8	2.7	.53			-10272			302	48	2-2
1582	12 50 15	54 27.9	28	3.3		-3.11	-1.38				123	63	1-2
1583	12 51 40	-9 15.8	8	2.5	-.02	-.99		-10274	4902	PSI VIR	304	53	2-2
1584	12 51 53	56 12.8	22	2.5	1.07		-2.07	60222	4905	EPS UMA	122	61	2-2
1585	12 52 40	47 27.5	15	1.8	-.35			50222	4909	TU CVN	121	70	2-2
1586	12 52 54	3 38.6	10	2.5	-1.45	-1.54		226	4910	DEL VIR	305	66	1-1
1587	12 54 16	-22 59.2	5	3.2			-2.65				305	40	1-2
1588	12 54 18	66 16.7	26	1.8	-.54	-.97		70116		RY DRA	122	51	2-2
1589	12 56 13	17 40.4	17	3.3	.74			20251	4920	36 COM	313	80	1-1
1590	12 56 46	0 29.0	8	3.6		-.87					307	63	1-2
1591	12 57 22	19 38.0	17	3.2		-1.00	-3.19			DO 14510	317	82	1-1
1592	12 59 41	84 41.4	136	3.8	1.80	-.12					123	33	2-6
1593	12 59 48	11 14.5	17	3.6	.86			10261	4932	EPS VIR	312	74	1-1
1594	12 59 56	5 25.9	10	2.6	-1.60	-2.49	-3.75	10262		RT VIR	310	68	1-1
1595	13 0 1	17 7.8	17	3.4	1.61		-1.65				317	79	1-1
1596	13 1 2	6 34.8	16	3.8		-2.29					311	69	1-1
1597	13 1 21	7 19.5	17	3.7	1.00			10264		CO VIR	312	70	1-1
1598	13 2 7	59 25.6	44	2.3	1.55	-1.25					121	48	1-2
1599	13 5 15	13 40.0	15	2.8	1.65					UZ VIR	319	76	1-1
1600	13 5 59	39 26.8	20	2.5	1.45						108	77	1-1

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	I	B	I	N
	H	M	S												
		O		S											
1601	13 8 37	-30 38.1	7	3.3	.		-2.48				308	32			1-1
1602	13 8 48	-10 14.3	8	2.2	1.28			-10280			311	52			2-2
1603	13 8 55	-29 35.3	7	3.4			-2.92				308	33			1-1
1604	13 10 18	-1 32.2	10	3.6	.77	-1.05		229		DO 3322	314	61			1-2
1605	13 10 23	42 29.7	22	2.4	1.58		.				108	74			1-1
1606	13 11 30	-2 31.5	9	2.7	-2.35	-3.15	-4.06	230		SW VIR	314	60			2-2
1607	13 11 35	5 37.1	16	3.9	1.71						318	58			1-1
1608	13 11 56	11 34.8	15	2.9	1.30			10267	4998		323	73			1-1
1609	13 13 34	-0 54.9	16	3.8			-3.39				316	61			1-2
1610	13 13 40	6 43.4	16	3.8	.80			10268		DO 3328	320	69			1-1
1611	13 15 5	5 44.7	16	3.9	.27			10270	5015	SIG VIR	320	67			1-1
1612	13 15 22	55 54.0	22	2.4	1.70						115	61			2-2
1613	13 15 41	32 28.9	19	2.6	1.55		.				76	82			1-1
1614	13 16 12	-22 54.6	6	2.0	.86		.	-20249	5020	GAM HYA	311	39			2-2
1615	13 17 4	45 46.5	23	3.0	.30	-.88	.	50226		V CVN	108	71			1-1
1616	13 18 5	71 4.9	67	4.5		-1.89	.				120	46			1-2
1617	13 19 57	-3 31.9	7	2.2	1.35	-.26		233		DO 3350	318	58			2-2
1618	13 20 40	47 13.7	23	3.0	.74		.	50227		DO 34360	108	69			1-1
1619	13 20 44	42 21.3	22	2.3	1.65		.				102	74			1-1
1620	13 21 43	37 17.6	11	2.0	1.42			40245	5052	DO 14749	90	78			1-1
1621	13 21 50	55 10.2	19	1.9	1.38		-2.91	60224	5054	ZET UMA	113	62			2-2
1622	13 22 33	-10 53.7	8	2.1	1.31			-10286	5056	ALF VIR	316	51			2-2
1623	13 24 59	-22 47.9	15	4.0	.93		.				314	39			1-2
1624	13 25 31	40 7.6	21	2.4	1.08		.				95	75			1-1
1625	13 26 12	55 24.2	29	3.9	1.74	-.96				R	112	61			1-2
1626	13 26 47	-10 50.8	15	4.0	1.56	-.17					318	51			1-2
1627	13 27 0	-23 1.8	6	1.5	-3.16	-4.13	-4.51	-20254	5080	R HYA	314	39			2-2
1628	13 27 17	22 58.8	17	2.8	.	-2.92	.				8	60			1-1
1629	13 28 9	-30 53.2	8	2.6		-1.48	.				313	31			2-2
1630	13 29 13	23 6.5	17	2.8	1.48						10	80			1-1
1631	13 29 25	-5 59.4	14	4.0	-.05						321	55			1-2
1632	13 29 35	-27 51.6	10	2.3	1.14	-3.40		-10288	5095	74 VIR	314	34			1-2
1633	13 30 21	-6 57.1	9	2.7	-.17	-1.05		-10290	5101	I 4276	321	54			2-2
1634	13 30 47	-26 19.5	8	2.4		-1.37				S VIR	314	35			2-2
1635	13 31 42	25 18.6	18	2.9	1.24						23	60			1-1
1636	13 32 28	79 2.5	43	2.6		-1.26				DO 34419	EO	120	38		2-4
1637	13 33 20	76 46.0	58	3.3	1.33			80025	5131		120	40			2-4
1638	13 33 43	-2 59.3	10	2.8	-.01		-2.75				324	58			2-2
1639	13 36 7	-11 11.8	9	2.7	1.43			-10291			321	50			2-2
1640	13 36 18	1 26.6	12	4.0			-2.60				329	62			1-2



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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	J	B	I	N
	H M S	O	S								O				
1641	13 38 9	-30 14.4	9	3.5		-1.86					315	31			1-2
1642	13 38 21	54 54.2	28	1.9	.36			50231	5154	83 UKA	108	61			1-1
1643	13 38 59	-8 27.9	15	3.9	.55			-10293	5150	82 LVR	323	52			1-2
1644	13 41 9	-9 20.3	10	3.8		-.64					324	51			1-2
1645	13 42 9	0 18.3	11	4.0	-.31						330	60			1-2
1646	13 43 13	-0 12.9	12	4.0			-2.16				330	59			1-2
1647	13 44 21	25 27.1	18	2.8	1.23						27	77			1-1
1648	13 44 42	-17 35.5	7	2.2	.62			-20258	5181	87 VIR	321	43			2-2
1649	13 45 7	12 56.4	16	3.2	1.38						348	70			1-1
1650	13 46 13	-28 7.2	8	2.3	-3.84	-5.27	-5.66	-30207		W HVA	318	33			2-2
1651	13 46 48	16 .3	17	3.0	.35			20263	5200	NU BOO	356	72			1-1
1652	13 46 53	39 47.6	11	2.1	-.10	.51		40248	5199	R CVN	83	73			1-1
1653	13 49 15	-3 26.4	10	2.8	.46	.58		237		AY VIR	331	56			2-2
1654	13 49 33	34 40.7	10	2.2	-.04			30251	5219	DO 14821	66	75			1-1
1655	13 49 39	-31 29.1	14	3.9		-3.23	-3.46				318	29			1-2
1656	13 49 53	64 58.9	20	2.3	-.31	-.42		60226	5226	10 BOO	113	51			2-2
1657	13 50 3	-17 21.8	14	4.0	1.54						323	43			1-2
1658	13 51 21	52 33.7	27	2.1	1.08			50234		DO 34497	102	62			1-1
1659	13 51 49	16 25.6	16	3.4	.79	-1.95	-3.26	-30208			359	72			1-1
1660	13 52 32	-26 12.2	7	1.9							320	34			2-2
1661	13 54 3	27 42.3	17	3.1	1.11			30252	5247	9 BOO	38	76			1-1
1662	13 54 6	-11 10.6	10	3.7			-3.27				327	48			1-2
1663	13 54 46	-30 50.5	8	2.6	.93	-.98		-30210		TW CEN	319	30			2-2
1664	13 56 8	11 11.2	16	3.1	1.29	-1.42					350	67			1-1
1665	13 56 20	59 49.8	20	2.0	1.44	-1.19	-2.81				108	56			2-2
1666	13 56 32	-5 20.1	14	4.2	1.46						332	53			1-2
1667	13 56 55	-18 41.5	10	3.6		-.65					325	41			1-2
1668	13 57 4	40 32.1	22	2.2	1.44						90	71			1-1
1669	13 57 31	37 27.0	11	2.2	1.32			40251		RW CVN	72	72			1-1
1670	13 58 7	62 13.0	23	2.5		-1.00					110	53			1-1
1671	13 58 11	39 15.7	21	2.5	1.46						77	71			1-1
1672	13 58 51	39 42.6	21	2.5	1.42						78	71			1-1
1673	13 59 34	-27 9.0	14	3.9	1.30	.92		-30212	5265		322	33			1-2
1674	13 59 38	-26 45.0	7	1.7		-3.22	-4.41				322	33			1-2
1675	14 1 3	-2 13.5	15	4.1		-1.40	-2.39			EO	336	56			1-2
1676	14 3 30	-26 28.3	13	3.8	.64			-30213	5287	PI HVA	323	33			1-2
1677	14 3 58	-13 53.5	8	2.9	1.04			-10297			329	45			2-2
1678	14 4 44	-7 44.4	12	3.9	.95						333	50			1-2
1679	14 4 48	20 38.0	17	2.9	1.50						16	71			1-1
1680	14 5 58	44 5.6	22	2.4	-.59	-1.08		40253	5299	DO 34564	95	67			1-1

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	B	I	M
	H	G	S								O	O		
1681	14 5 59	24 12.1	17	2.7	1.53						27	72		1-1
1682	14 6 41	-14 37.1	11	3.9		-.69					330	44		1-2
1683	14 7 34	-15 8.3	13	4.2			-3.24				330	43		1-2
1684	14 8 11	-16 4.8	8	2.7	.45			-2026	5301	RU HYA	329	42		2-2
1685	14 8 37	-28 37.6	8	2.6	1.07			-30215			323	31		2-2
1686	14 8 38	-7 33.9	10	2.8		-1.43	-3.25			A	335	50		2-2
1687	14 8 41	77 47.9	53	3.3	1.24			80026	5321	4 UMI	118	39		3-4
1688	14 10 14	-10 2.7	7	1.6	.64			-10300	5315	KAP VIR	334	48		2-2
1689	14 10 30	-13 36.1	8	2.9	1.18			-10301			331	44		2-2
1690	14 11 16	69 39.1	16	1.4	1.11			70123	5334	DO 34594	113	46		2-2
1691	14 11 52	77 56.6	40	2.6	1.31						118	39		2-3
1692	14 13 11	19 43.8	10	2.1	.98						16	69		1-1
1693	14 13 21	19 25.3	10	2.1				20270	5340	ALF 800	15	69		1-1
1694	14 14 11	-16 11.5	8	2.7	-3.04	-3.60		-20266			331	42		2-2
1695	14 15 5	-20 36.2	8	2.6	.28	-.48					329	38		2-2
1696	14 15 59	67 1.3	26	2.0	1.76	-.21					110	48		2-2
1697	14 16 29	-14 9.3	8	2.3	.25	-1.33		70124		U UMI	333	43		2-2
1698	14 16 32	-13 9.3	10	2.3	1.39	-.76	-1.99	-10305			333	44		1-2
1699	14 16 42	-20 25.9	13	3.9	.76			-10304			329	38		1-2
1700	14 16 49	3 1.0	14	4.1	1.45	-.83					348	58		1-2
1701	14 20 11	2 36.0	9	2.3		-3.11					348	57		1-2
1702	14 20 41	-1 43.6	13	3.9			-3.23				344	53		1-1
1703	14 20 57	-21 45.9	11	3.5			-3.51				330	36		1-2
1704	14 21 33	-21 43.0	11	3.5			-3.76				330	36		1-2
1705	14 21 46	84 3.1	220	7.0	1.38		-2.32			R CAM	120	33		2-6
1706	14 21 46	25 54.5	10	2.3	2.32	-3.57	-4.40	30257		RX 800	34	69		1-1
1707	14 22 39	33 7.4	20	2.6	1.50						55	69		1-1
1708	14 22 59	58 51.3	33	2.7	-.16		-5.44			EO	102	55		1-1
1709	14 24 39	-24 59.0	11	3.7			-2.58				329	33		1-2
1710	14 24 44	4 54.1	11	2.5	.46	-1.55		243		RS VIR	353	58		2-2
1711	14 26 2	-6 39.3	8	2.3	1.26	-1.01		-10306	5410	106 VIR	341	49		2-2
1712	14 26 7	52 2.4	28	2.6	.73		-5.80				93	59		1-1
1713	14 26 34	38 9.6	21	2.4	1.32						67	67		1-1
1714	14 27 30	75 54.2	43	3.2	.70		-2.90	80028	5430	5 UMI	115	40		4-4
1715	14 28 4	-29 51.8	8	2.3	-.75	-2.35	-3.38	-30222		Y CEN	327	28		2-2
1716	14 29 41	30 34.6	10	2.2	.43			30259	5429	RHO 800	47	68		1-1
1717	14 30 23	7 19.6	16	4.1	1.62						358	59		1-2
1718	14 30 42	48 34.3	27	2.7		-3.04	-4.65				87	61		1-1
1719	14 37 11	32 44.4	10	2.1	-.46	-1.09		30261		RV 800	52	66		1-1
1720	14 39 13	31 47.3	20	2.7	-.04			30262		RW 800	50	66		1-1

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	$\alpha$	$\delta$	$S$								$O$	$O$	$O$	$O$	
1721	14 39 20	-26 3 7	8 2 5			-1.70				DO 3552	332	30	2-2		
1722	14 39 59	5 12 0	16 4 0			-1.50					358	56	1-2		
1723	14 40 33	-26 35 0	12 3 3				-3.21				352	30	1-2		
1724	14 41 2	26 43 3	19 2 7		.03				30253	5490	38	65	1-1		
1725	14 42 36	36 36 5	20 2 9		.98		-4.42			N 800	61	64	1-1		
1726	14 42 49	56 19 9	26 1 6		1.54				60230	UV CDA	96	55	1-1		
1727	14 43 3	-25 58 9	12 3 2				-2.95				333	30	1-2		
1728	14 43 49	15 20 5	17 3 2		.87	-1.38			20275	DO 15069	15	61	1-1		
1729	14 43 53	-20 20 7	11 3 9			-1.32					356	35	1-2		
1730	14 44 34	0 22 2	14 4 0			.89					354	51	1-2		
1731	14 44 43	-12 29 3	13 3 6			-1.16					342	41	1-2		
1732	14 45 32	-36 27 2	9 1 9		.66				-30211E	5514	348	21	1-1		
1733	14 46 24	-36 42 1	11 3 7				-4.47			55 MYA	328	20	1-1		
1734	14 46 52	-7 55 5	13 4 1		1.44						346	45	1-2		
1735	14 47 7	12 52 7	17 3 5		.14						11	59	1-1		
1736	14 47 20	-27 43 8	11 4 2		.61				-30226	5520	333	26	1-2		
1737	14 49 54	-28 31 7	13 3 5		1.06						333	27	1-2		
1738	14 50 32	-28 28 1	13 3 5		.59						333	27	1-2		
1739	14 50 38	21 33 1	17 3 2		1.14						28	62	1-1		
1740	14 51 7	74 22 5	28 2 0		-1.52	-1.59	-2.76		70125	5563	113	40	4-4		
1741	14 52 12	-2 29 6	14 3 9				-3.24				353	48	1-2		
1742	14 53 42	-25 12 9	10 4 0		1.26						356	29	1-2		
1743	14 54 59	-12 17 3	9 2 7		.56	-1.15			-10308		345	40	2-2		
1744	14 56 42	66 3 7	17 2 1		-1.35	-1.54			70126	5589	105	47	2-2		
1745	14 57 3	4 45 2	11 2 4		1.35				256	5584	2	52	2-2		
1746	14 58 0	-34 16 6	8 1 9		1.30				-30214E	AP CEN	331	21	1-1		
1747	14 58 42	-18 36 3	8 2 6		1.76				-20278		341	34	2-2		
1748	14 59 37	40 33 9	22 1 7		1.15				40263	ECT 800	68	60	1-1		
1749	15 0 16	2 16 9	8 2 3		1.73	.34			5602		0	50	2-2		
1750	15 1 7	-25 2 5	7 2 2		-1.56	-1.93			259	110 VIR	337	29	2-2		
1751	15 1 14	5 45 5	14 3 5			-3.79			-30228	SIG L18	4	52	1-2		
1752	15 7 18	-36 9 3	9 3 6			-2.95					332	19	1-1		
1753	15 8 42	-22 14 4	13 3 5				-4.14				341	30	1-2		
1754	15 9 47	19 9 1	17 3 3		.29				20277	5654	26	57	1-1		
1755	15 12 13	15 20 3	17 4 0			-2.83					20	55	1-2		
1756	15 12 21	-2 16 3	10 2 4		.68				262		358	45	2-2		
1757	15 12 34	15 25 6	17 4 0			-3.60				DO 3770	21	55	1-2		
1758	15 12 50	15 29 6	17 4 0			-4.07					21	55	1-2		
1759	15 14 14	-12 33 0	8 2 5		1.58	-3.80					349	37	2-3		
1760	15 15 48	15 56 3	17 3 3		1.31						22	54	1-2		

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L 11	B 11	N
	H M S	O	S								O		
1761	15 16 40	9 3	8	2.1	.70			-10317			353	39	3-3
1762	15 18 11	16 45 6	11	2.7		.23	-2.29				24	54	1-2
1763	15 18 37	36 3 4	8	3.5	.20			-30218E	5705	PHI LUP	334	17	1-1
1764	15 18 56	32 4 5	8	3.7	.64			-30234			336	21	1-1
1765	15 19 12	14 28.2	10	2.2	.61	-1.07		10290		S SER	20	53	2-2
1766	15 21 21	33 46.3	8	3.5		-1.87					336	19	1-1
1767	15 21 23	22 42.2	8	2.5	.86	-1.73		-20286		RS LIB	343	28	2-2
1768	15 22 10	9 5.1	16	3.9		.98					14	50	1-2
1769	15 22 21	2 6.0	10	2.4	.09	-1.58		265		DO 3724	1	43	2-2
1770	15 22 33	29 37.8	9	3.8			-4.38				339	22	1-1
1771	15 22 35	36 5.9	8	3.5	.86	-3.01	-3.44	-30220E			335	17	1-1
1772	15 23 23	15 25.9	12	2.6	.90			20280	5739	TAU1 SER	23	52	2-2
1773	15 25 27	19 43.7	10	2.2	.66	-1.52	-2.55	20281		WX SER	29	53	2-2
1774	15 27 48	13 13.4	10	2.5	1.53					BS LIB	352	34	2-3
1775	15 28 26	22 45.9	8	3.6	1.36						344	27	1-2
1776	15 29 19	23 42.9	5	2.0	.14			-20288			344	26	2-2
1777	15 29 55	3 50.7	11	2.7	1.27			268		LW SER	9	45	2-2
1778	15 29 56	16 53.9	13	3.8			-3.51				349	31	1-2
1779	15 30 19	13 42.6	17	3.9	1.62						21	50	1-2
1780	15 30 56	78 48.2	46	2.7	.42	-1.66	-2.70	80030		S UMI	114	36	4-4
1781	15 31 24	18 21.8	8	3.6	1.69						348	30	1-2
1782	15 32 5	13 2.4	16	3.5		-1.47					21	49	1-2
1783	15 32 52	77 31.5	40	2.4	.99		-4.29	80031	5826	THE UMI	113	36	4-4
1784	15 32 54	12 22.1	16	3.5		-2.84					20	49	1-2
1785	15 33 37	11 56.9	16	3.5	1.56	-3.76					19	49	1-2
1786	15 33 40	18 39.3	14	3.4			-4.47				349	29	1-2
1787	15 33 55	28 1.2	8	3.9	.16			-30239	5794	UPS LIB	342	22	1-1
1788	15 34 4	15 16.6	10	2.3	-1.35	-2.03	-2.87	20282		TAU4 SER	24	50	2-2
1789	15 34 4	21 48.2	19	3.7	1.78						34	52	1-1
1790	15 35 55	24 42.1	19	3.6	.85			20283		DO 15290	39	53	1-1
1791	15 36 10	8 24.0	14	3.3	1.38						358	36	1-2
1792	15 39 3	19 31.4	8	2.1	.70		-2.34	-20282	5838	KAP LIB	349	28	2-2
1793	15 41 5	1 32.9	9	2.1	.21	-1.44		269		BC SER	5	40	2-2
1794	15 41 55	6 33.2	16	3.9	.05	.16		10294	5854	ALF SER	14	44	1-2
1795	15 44 43	11 24.2	17	3.7		-1.15					21	46	1-1
1796	15 45 55	20 12.2	8	2.4	1.40			-20293			350	26	2-2
1797	15 46 20	5 1.1	16	3.5		-1.04					13	42	1-2
1798	15 46 23	15 21.0	8	2.7			-3.40			SS LIB	354	29	2-3
1799	15 46 36	18 17.9	12	2.3	.25	-1.54		20284	5879	KAP SER	30	48	2-2
1800	15 46 51	5 59.7	15	3.8		-2.13					14	43	1-2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(J)	M(11)	M(20)	IRC	BS	COMMENTS	L	I	B	I	N
	H	M	S												
		O		S											
1801	15 48 16	15 17.3	10	2.2	-23	-1.31		20285	5894	R SER	26	47	0		2-2
1802	15 48 30	-8 21.2	10	2.3		-1.19					0	34			2-2
1803	15 48 58	21 8.8	19	3.7	.57			20286	5899	RHO SER	34	49			1-1
1804	15 49 44	-25 57.7	8	1.1	1.47			-30246			346	21			1-1
1805	15 51 1	-16 32.6	7	2.0	1.35	-2.01		-20296	5908	THET LIB	354	28			3-3
1806	15 51 47	-10 43.0	7	2.2	1.61			-10326		SVS 2494	359	32			3-3
1807	15 51 55	-37 11.1	8	1.7	2.30	-2.58					339	12			1-1
1808	15 52 36	5 5.2	16	3.5		-1.41					14	41			1-2
1809	15 52 37	-3 48.6	10	2.5	1.53			274		DO 3875	5	36			2-2
1810	15 52 46	-12 40.8	7	2.0	1.81			-10327		SW LIB	357	30			3-3
1811	15 52 51	-18 38.9	7	2.1	1.62			-20299			352	26			3-3
1812	15 52 57	-8 5.1	14	3.3		-1.10					1	33			1-2
1813	15 54 9	-18 32.1	8	2.6	1.63		-3.28				353	26			2-3
1814	15 54 11	-15 53.9	7	2.0	1.43			-20301			355	28			3-3
1815	15 54 46	-29 8.1	10	3.8	1.43						345	18			1-1
1816	15 55 26	27 1.5	20	3.3	.92			30280	5947	EPS CRB	44	49			1-1
1817	15 57 14	7 2.4	10	2.4		-1.51					17	41			1-2
1818	15 57 36	-12 12.3	9	2.5	1.15			-10329		FS LIB	358	30			2-3
1819	16 1 16	85 2.8	233	7.7		-.91				1 1168	119	31			2-6
1820	16 1 36	15 1.6	11	2.3	1.46	-.65					28	44			2-2
1821	16 2 56	-21 38.1	10	3.8	.58			-20306		Z SCO	352	22			1-1
1822	16 2 59	-30 41.8	10	3.9		-1.54					345	16			1-1
1823	16 5 3	-26 10.5	10	3.6	.80			-30253	6001		349	19			1-1
1824	16 5 55	-0 34.2	15	3.5	1.70						10	35			1-2
1825	16 6 4	8 41.8	11	2.6	.39			10302	6010	47 SER EO	21	40			2-2
1826	16 6 4	-1 25.5	9	2.1	.94	-1.35		277		DX SER	10	35			2-2
1827	16 6 40	-3 1.7	14	3.8	1.20					CF SER	8	34			1-2
1828	16 7 13	-3 18.6	10	2.4	1.39			279	6016		8	33			2-2
1829	16 7 20	5 8.7	15	3.5			-4.83				17	38			1-2
1830	16 7 27	-27 40.5	11	4.1	1.18	-.39					348	17			1-1
1831	16 7 53	-1 24.3	10	2.3		-2.29					10	34			1-2
1832	16 8 8	25 11.9	19	3.5	-.62	-2.02		30283		RU HER	42	46			1-1
1833	16 9 26	3 51.0	10	2.4		-1.44					16	37			1-2
1834	16 9 30	23 37.7	19	3.3	-.28	-.67		20294	6039	LQ HER	40	45			1-1
1835	16 11 0	-11 45.3	9	2.6	1.65	-.54		-10334	6048	CHI SCO	1	27			2-3
1836	16 11 32	-36 40.3	10	3.6			-3.49				342	10			1-1
1837	16 11 47	-3 33.3	8	2.0	-1.43	-1.94		280	6056	DCL OPH	9	32			2-2
1838	16 15 46	-4 35.2	10	2.5	.93			282	6075	EPS OPH	9	31			2-2
1839	16 16 4	-1 37.6	15	3.1		-.75					11	32			1-2
1840	16 16 7	-14 46.4	9	2.7	1.72			-10335	6078		0	24			2-3

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	M M S	O .	S								O	O	
1841	16 16 16	59 52 5	21	2 9	-29	-.64		60241	6086	AT DRA	91	42	1-1
1842	16 16 48	-17 41 5	11	4 0	1.50						357	22	1-2
1843	16 17 10	-14 31 9	7	2 2	1.48			-10336			0	24	3-3
1844	16 17 40	-24 2 9	9	2 0	1.04			-20311	6081	OMI SCO	352	18	1-1
1845	16 18 6	-25 27 8	11	4 0			-3.74	-30260	6084	SIG SCO	R 351	17	1-1
1846	16 18 9	-34 41 4	8	2 8		-.81				SVS 2645	344	11	1-1
1847	16 18 42	-7 31 4	10	2 6	1.02			-10337		W OPH	6	28	2-3
1848	16 18 44	-3 19 7	15	3 2		-1.61	-3.24			CO SER	10	31	1-2
1849	16 19 47	64 11 7	44	4 0			-2.72				96	40	1-2
1850	16 19 54	-25 31 3	11	4 0			-2.86				352	17	1-1
1851	16 20 16	-7 8 5	10	2 7	1.22			-10338			7	28	2-3
1852	16 20 24	30 59 4	20	3 1	1.54			30287	6103	XI CRB	51	44	1-1
1853	16 20 46	33 53 6	20	3 0	.95			30288	6107	NU1 CRB	55	44	1-1
1854	16 20 53	-22 14 2	7	2 2	.66			-20315			354	19	2-2
1855	16 22 47	-24 20 6	11	3 9		-1.53	-2.95			V852 OPM	EO R 353	17	1-1
1856	16 23 16	-33 42 9	11	3 7		-2.24					346	11	1-1
1857	16 23 28	-1 19 4	15	3 3	1.83						13	31	1-2
1858	16 23 30	19 1 1	18	3 2	-1.36	-2.63	-3.36	20298	6119	U HER	35	40	1-1
1859	16 23 59	-12 18 4	8	2 1	.93			-10339		V OPM	3	25	3-3
1860	16 24 28	-8 50 5	10	2 6		-.63	-2.33				6	27	2-3
1861	16 25 2	7 30 1	7	2 0	.27	-.86	-2.56	-10340	6128		7	27	3-3
1862	16 26 0	34 54 1	11	2 5	.91	-1.48	-2.89	30292			56	44	1-1
1863	16 26 21	-26 19 4	15	4 0	<-3.66	-4.51	-4.93	-30265	6134	ALF SCO	352	15	1-1
1864	16 26 59	41 59 2	22	2 4	-2.35	-2.71	-2.42	40283	6146	G HER	66	44	1-1
1865	16 29 55	56 39 6	27	2 3							86	42	1-1
1866	16 30 0	-16 6	12	3 9	1.80						1	21	1-2
1867	16 30 2	50 59 0	31	5 4			-2.54				78	43	1-1
1868	16 30 16	72 23 0	27	2 0	-.43	-1.50		70135		R UMI	105	36	3-3
1869	16 30 48	-16 2 7	8	2 0	.60	.99	-2.90	-20319		T OPH	1	21	2-2
1870	16 33 23	-31 6 6	11	3 9	.36			-30266		ST SCO	349	11	1-1
1871	16 34 4	78 16 0	64	3 8	1.67	-.64				N 6217	111	33	2 4
1872	16 34 22	60 33 8	46	4 8	1.07	-.62		60243		TX DRA	91	40	1-1
1873	16 35 42	22 30 8	18	3 2	.75			20303		DO 15566	41	39	1-1
1874	16 36 2	-8 31 3	11	2 7	1.13	-.69		-10344			8	24	2-3
1875	16 36 15	-21 48 7	8	2 7	1.09			-20321			357	16	2-2
1876	16 36 48	-20 47 3	8	2 7	1.01	-1.04		-20322			358	17	2-2
1877	16 37 18	-33 56 5	12	3 7	1.22					SVS 2778	348	8	1-1
1878	16 37 27	-32 19 7	12	4 1	.57			-30268		SU SCO	349	9	1-1
1879	16 37 38	49 1 1	24	2 3	.38			50253	6200	42 HER	76	42	1-1
1880	16 38 19	-19 50 9	8	2 8	.84			-20324			359	17	2-2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L II	B II	N
	H M S	O'	S								O	O	
1881	16 38 21	-11 42.7	9	2.7	1.64			-10345			6	22	2-3
1882	16 38 43	-17 41.4	9	2.7	1.52			-20325	6196		1	18	2-2
1883	16 38 46	-27 1.0	10	2.1	.50			-30269		AX SCO	323	13	1-1
1884	16 40 25	-34 1.3	12	3.7	1.70	-2.24				EO	349	8	1-1
1885	16 41 4	39 1.2	11	2.2	1.08			40287	6220	ETA HER	62	41	1-1
1886	16 42 7	54 59.3	31	3.2	.52	-1.79		50255		S DRA	83	40	1-1
1887	16 42 31	-3 .9	10	2.5	.24	-.63		291		DO 4132	14	26	2-2
1888	16 42 50	15 52.8	17	3.2	.79			20306	6227	SVS 101605	34	35	1-1
1889	16 43 3	12 16.5	16	3.4	1.19			16310		UV HER	30	33	1-1
1890	16 43 53	-11 35.0	8	2.3	.22	-1.07		-10347		V446 OPH	7	21	2-2
1891	16 45 48	42 19.2	11	2.2	.07			40269	6242	DO 35442	67	40	1-1
1892	16 45 51	-28 .8	13	4.3	1.73						354	11	1-1
1893	16 46 2	-36 11.3	13	3.7	.23						347	5	1-1
1894	16 46 17	-19 27.0	12	4.1	1.33			-20333		RR OPH	0	16	1-2
1895	16 46 36	-21 45.0	9	2.7	.97			-20334			359	14	2-2
1896	16 46 49	62 13.3	17	1.8	1.51	-.18				N 6238	92	38	3-3
1897	16 47 19	-13 36.5	13	4.1		-2.31					6	19	1-2
1898	16 47 21	57 54.2	39	4.1	.07			60248		AH DRA	87	39	1-1
1899	16 47 31	63 2.1	19	2.5	1.07	-1.88	-3.34			N 6247	93	38	2-3
1900	16 47 50	11 4.7	16	3.3		-2.55				DO 4159	29	32	1-1
1901	16 48 33	-23 30.6	13	3.9			-2.74				357	13	1-2
1902	16 49 5	-12 20.3	9	2.2	1.43					EO	7	20	1-2
1903	16 49 11	-35 27.8	13	3.8		-1.81	-3.63				348	5	1-1
1904	16 49 26	-12 49.3	9	2.7	1.07	-.87		-10348			7	19	2-2
1905	16 49 27	15 1.9	17	3.1	.48			20307		S HER	34	33	1-1
1906	16 51 29	6 36.4	15	3.4			-3.16				25	29	1-1
1907	16 51 31	-6 38.9	10	2.7		-.90		-10349			12	22	2-3
1908	16 52 8	-21 52.5	7	1.5	.18	-1.09		-20336		SY OPH	359	13	2-2
1909	16 53 13	-32 45.5	13	4.1		-1.32	-3.38	-30272		EO	351	6	1-1
1910	16 53 31	-30 30.7	13	4.0	-.62	-1.30		-30271		RR SCO	353	8	1-1
1911	16 54 8	-10 23.0	14	4.2	1.22			-10352			9	20	1-2
1912	16 55 1	9 19.2	15	3.4		-.95	-3.29				28	30	1-1
1913	16 55 10	-1 15.6	15	3.1		-.55	-2.75				18	24	1-1
1914	16 55 24	9 25.9	15	3.4	.31			10315	6299	KAP OPH	28	29	1-1
1915	16 55 48	16 22.5	16	3.4	1.66						36	32	1-1
1916	16 56 56	-24 58.4	9	2.8	1.13			-30274	6308		358	11	2-2
1917	16 57 17	-10 51.7	14	4.1	1.31						9	19	1-2
1918	16 58 17	-34 25.6	13	4.0		-1.69				EO	350	5	1-1
1919	17 0 2	-35 .1	14	4.0	1.20		-3.92			EO	350	4	1-1
1920	17 0 9	-20 27.9	10	2.2	1.49	-1.31		-20341			2	13	1-2

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	H	M	S											
		O												
1921	17 4 48	-9 18.1	14	4.0			-2.77				12	18	1.2	1.2
1922	17 4 54	-24 39.0	9	2.7	.24	-3.39	-4.33			A	359	9	2.2	2.2
1923	17 4 54	-16 1.2	9	2.7	.38	-.98		-20347		R OPH	6	14	2.2	2.2
1924	17 5 57	78 40.0	58	2.4		-1.37	-3.63			N 6331	111	32	2.4	2.4
1925	17 6 51	49 5.7	24	2.2	1.18						75	37	1.1	1.1
1926	17 7 3	60 49.9	24	2.2		-1.03				R	90	36	2.3	2.3
1927	17 7 58	-32 13.4	13	3.9		-3.19	-3.78			N 6306	353	4	1.1	1.1
1928	17 8 12	2 59.2	13	4.1	2.23	-2.68		-30282		AM SCO	23	24	1.2	1.2
1929	17 8 26	40 46.0	22	2.3	16			40292		DO 15826	65	36	1.1	1.1
1930	17 8 29	64 23.4	22	2.0	.35	-.85		60249		TV DRA	94	35	3.3	3.3
1931	17 9 59	29 46.0	19	2.8			-2.41				52	33	1.1	1.1
1932	17 10 6	10 39.7	9	2.1	.72		-2.40		6393	37 OPH	31	27	1.1	1.1
1933	17 10 10	-14 47.7	9	2.9	1.35	-.99		-10358			8	14	2.2	2.2
1934	17 10 13	-10 29.0	9	2.9	1.16	-1.61		-10359			12	16	2.2	2.2
1935	17 10 58	-0 3.6	14	3.4	2.05						21	22	1.2	1.2
1936	17 11 22	4 56.8	16	2.8			-2.66				26	24	1.1	1.1
1937	17 11 38	-33 21.4	14	3.8	.79	-1.50	-3.37	-30291E		RW SCO EO	353	3	1.1	1.1
1938	17 11 50	14 8.4	16	2.9	.20			296			35	28	1.1	1.1
1939	17 11 51	-4 44.4	10	2.8	1.68		-3.91	10322			17	19	2.2	2.2
1940	17 11 55	8 59.2	15	3.4	1.18	-2.65					30	26	1.1	1.1
1941	17 11 59	0 42.1	9	2.3	1.17		-3.91	297			21	21	2.2	2.2
1942	17 12 1	57 56.1	23	2.1	1.26			60250		TT DRA	96	36	2.2	2.2
1943	17 12 2	-30 27.7	14	4.0	.68	-1.61		-30287			355	5	1.1	1.1
1944	17 12 19	11 8.4	9	2.1	.22	-1.35		10323		V438 OPH	32	26	1.1	1.1
1945	17 12 22	-21 22.1	7	2.1	1.15	-.49		-20350		V1699 OPH	3	10	2.2	2.2
1946	17 12 26	-9 53.9	9	2.8	1.52			-10361		V505 OPH	12	16	2.2	2.2
1947	17 12 27	14 25.9	16	2.9	<-3.72	-3.87	-4.29	10324		ALF HER	16	28	1.1	1.1
1948	17 12 46	36 25.3	20	2.7	.91	-.47		40293		UK HER	60	34	1.1	1.1
1949	17 12 56	-3 10.8	15	2.9	.22	-2.05	-3.22			A	18	20	1.2	1.2
1950	17 13 18	36 51.6	11	2.1	1.34	-.89		40295		PI HER	61	34	1.1	1.1
1951	17 13 20	-15 7.9	10	2.4	1.40			-20351			8	13	1.2	1.2
1952	17 14 20	-4 9.1	8	2.1	1.91	-1.61	-4.07				18	15	1.2	1.2
1953	17 15 9	23 53.1	18	2.9	1.91	-1.39			EC		46	31	1.1	1.1
1954	17 16 11	-19 32.9	13	4.2	1.28	-.85	-2.94				5	10	1.2	1.2
1955	17 17 16	2 11.8	14	3.4	1.39			301		DO 4268	24	21	1.1	1.1
1956	17 17 52	18 8.7	17	2.7	.47			20320		SVS 3123	40	26	1.1	1.1
1957	17 19 8	-32 9.3	14	3.9	.80	-2.40		20321		V729 SCO	355	2	1.1	1.1
1958	17 19 21	16 46.9	9	2.2	1.14			-10366		DO 15937	39	27	1.1	1.1
1959	17 19 22	-13 5.8	9	2.8	1.33			302		AB SER	11	13	2.2	2.2
1960	17 20 29	0 56.3	8	2.7	1.50	-.76				DO 4277	23	20	2.3	2.3



CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L I I	B I I	N
	H M S	D O .	S .								O	O	
1961	17 20 44	-29 15.9	10 2.2		1.12	-1.21		-30293			357	4	1-1
1962	17 21 31	10 7.6	9 2.1			-1.68					32	24	1-1
1963	17 22 0	-24 38.2	14 4.0				-3.54				1	6	1-2
1964	17 22 31	-26 49.6	7 2.0		1.31			-30294		R	359	5	2-2
1965	17 22 56	-3 .5	10 2.9		1.30			303		AM OPH	26	18	2-2
1966	17 23 27	22 6.3	17 3.1			-1.01					45	28	1-1
1967	17 23 31	16 58.5	16 3.3		.25			20323	6495	DO 15972	39	26	1-1
1968	17 23 32	71 54.7	32 2.5		.72	-.24		70139		DO 35751	103	33	3-3
1969	17 24 1	4 11.5	15 3.2		.70			304	6498	SIG OPH	27	21	1-1
1970	17 26 36	-7 26.5	9 2.8		-.54	-1.51		-10369			16	14	2-2
1971	17 26 41	-19 26.5	8 2.8		-.29	-.80		-20364		TW OPH	6	8	2-2
1972	17 26 52	-26 25.1	8 2.4		.95	-1.49		-30300			0	4	2-2
1973	17 27 17	-18 54.3	10 3.6		1.46		*				7	8	1-2
1974	17 27 23	-26 41.1	8 2.5		1.21		-3.70	-30301			0	4	2-2
1975	17 28 8	50 58.9	25 2.5		.						78	33	1-2
1976	17 28 46	26 9.0	17 3.2		1.00			30307	6526	LAM HER	49	28	1-1
1977	17 29 41	17 47.5	16 3.0		-.70	-3.40		20326		DO 16032	41	25	1-1
1978	17 29 47	11 35.4	16 3.0			-3.17					35	23	1-1
1979	17 30 6	-22 24.4	9 2.7		1.51			-20368			4	6	2-2
1980	17 30 38	1 19.4	8 2.0		1.68	-4.02					25	18	1-2
1981	17 30 42	0 9.6	8 2.7		1.49			305		DO 4306	24	17	2-3
1982	17 31 6	-24 49.1	8 2.7		1.26			-20369			2	4	2-2
1983	17 31 16	-1 55.4	9 2.3		1.14		-2.32	307		DO 4305	22	16	2-2
1984	17 31 38	8 26.7	16 3.0		1.82					V7C3 OPH	32	21	1-1
1985	17 31 46	-23 42.9	9 2.6		.94	-1.20		-20370			3	5	2-2
1986	17 32 23	15 20.2	16 2.9		1.88						39	24	1-1
1987	17 33 12	53 59.1	14 2.2		1.11	-.80	-2.09	50267		SY DRA	82	33	1-2
1988	17 33 16	15 38.0	16 2.9		.57	-1.49		20328		NW HER	39	24	1-1
1989	17 33 32	17 39.9	16 3.0		1.70						41	24	1-1
1990	17 34 27	-16 17.7	9 2.6		1.38			-20372			10	8	2-2
1991	17 35 16	-20 48.0	7 2.1		1.47			-20374		SVS 3315	6	6	2-2
1992	17 36 4	-30 12.9	10 2.3		.39	-2.84					358	0	1-1
1993	17 36 12	57 46.0	17 1.9		.57	-.91	-2.32	60251		TY DRA	86	32	3-3
1994	17 36 58	53 22.2	19 2.2			-.54					91	32	2-2
1995	17 37 34	-2 9.4	8 2.3		.77			313	6578				

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	M	S													
		O													
2001	17 41 22	-29 26.5	15	4.1			-3.74			R 359	0				1-2
2002	17 42 12	-29 16.2	9	2.6	1.05	-2.13	-3.60			RCR 137	EO R	0	-0		2-2
2003	17 42 33	-28 51.0	9	2.6	.65	-3.88	-6.06	-30321		HFE 34	EO R	0	-0		2-2
2004	17 43 0	-28 50.8	9	2.6	1.01					SHARP. 17	EO R	0	-0		2-2
2005	17 43 37	-20 53.6	15	4.0	1.45							7	4		1-2
2006	17 43 50	-28 32.6	9	2.6	1.09	-2.06	-4.61			V747 SGR	FO R	0	-0		2-2
2007	17 44 57	7 9	16	3.8	.10							32	17		1-2
2008	17 45 6	-3 37.6	10	2.7	.79			320		DO 4412		22	12		2-2
2009	17 45 50	-28 46.3	9	2.6		-1.31	-3.28				EO	0	-1		2-2
2010	17 46 8	-28 59.8	10	2.3		-1.35	-3.85			V758 SGR		0	-1		1-2
2011	17 46 15	-28 42.4	7	2.1		-1.48	-4.20			SHARP. 20		1	-1		2-2
2012	17 46 16	-9 8.6	7	2.2	1.40			-10380				17	9		2-2
2013	17 46 49	-29 1.5	9	2.6	1.27	.86		-30325		V758 SGR	R	0	-1		2-2
2014	17 47 23	45 43.1	23	2.8	.93			50272		V337 MER		72	30		1-2
2015	17 47 29	-27 51.3	9	2.8	1.97	-1.52	-3.03				A	1	-0		2-2
2016	17 48 25	-8 2	9	2.7	.46	-2.30	-3.20					19	10		2-2
2017	17 48 55	-28 3	9	2.8	.58	-2.06		-10381		KW SGR		2	-1		2-2
2018	17 49 4	-2 27.1	10	2.7	1.63	-2.25	-2.28	-30326		DO 4429		24	12		2-2
2019	17 50 10	-26 56.9	8	2.5	.44	-2.20		324		HFE 39		3	-0		2-2
2020	17 50 24	-2 32.5	7	2.3	.10	-2.03		327		V533 OPM		24	12		2-2
2021	17 50 38	10 48.4	11	2.4		.89		10338		SVS 3547		36	18		2-2
2022	17 50 53	16 4	16	3.3		-3.25					A	4	-0		1-1
2023	17 51 13	-25 47.1	7	1.9	1.25	-1.92	-3.35	-20397		V774 SGR		6	1		2-2
2024	17 51 22	-23 14.0	8	2.0	.71	-1.95	-3.14			EO MER		54	24		1-1
2025	17 51 53	28 12.2	17	3.1	1.74										
2026	17 53 1	56 52.7	13	1.6	.98		-3.22	60253	6688	X1 DRA		85	30		3-3
2027	17 53 11	57 5.8	18	1.7	1.40	.57		60254	6685	88 CRA		95	30		2-3
2028	17 53 28	26 2.6	10	2.1	1.19	-1.50				89 HER		51	23		1-1
2029	17 53 38	-1 26.7	10	2.7	1.31			330		DO 4481		25	12		2-2
2030	17 53 39	60 47.5	22	1.8		.53				N 6510	R	90	30		2-3
2031	17 53 40	-27 39.8	9	2.8	1.67					SVS 3570		2	-1		2-2
2032	17 53 50	11 34.7	11	2.3	1.32	.40		10339		DO 4480		37	17		2-2
2033	17 53 54	10 38.8	16	3.1	.59			10340		DO 4490		36	17		1-2
2034	17 54 2	-23 54.0	8	2.0	1.55			-20405				6	0		2-2
2035	17 54 5	8 57.0	11	2.4		.98				SVS 3597		35	16		2-2
2036	17 54 6	-19 19.6	7	2.3	1.10	.70		-20403		VV SGR		10	3		2-2
2037	17 54 19	11 9.8	17	3.6	.57			10342		RT OPM		37	17		1-2
2038	17 54 48	37 13.3	20	2.7	.91			40306	6695	THET MER		63	26		1-1
2039	17 55 16	51 23.6	14	1.6	-1.61	-1.73		50274	6705	GAM DRA		79	29		3-3
2040	17 55 32	58 13.1	12	1.4	.39	-2.20	-2.33	60255		T DRA		87	30		3-3

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	M S	O	S								O	O	
2041	17 55 33	45 22.6	13	2.0	.15	-1.30		50273	6702	OP MER	72	28	2.2
2042	17 56 20	-9 46.8	9	2.6	.81			-10387	6698	NU OPH	18	7	2.2
2043	17 56 36	-20 35.4	7	1.7		-1.18					9	2	1.2
2044	17 57 7	14 16.9	17	3.5			-4.01				40	18	1.2
2045	17 57 17	-8 4.5	15	3.6	1.23						20	8	1.2
2046	17 57 25	-24 5.3	7	2.0	1.50	-2.55	-4.75	-20411		HFE 41+42	EO R	6	2.2
2047	17 58 12	-17 44.0	9	2.6	1.37	-1.47					11	3	2.2
2048	17 58 58	-23 35.4	7	2.0	.53	-2.62	-2.61	-20417		HFE 44	EO R	6	2.2
2049	17 59 14	-23 27.4	8	2.4		-1.00		-20418		SHARP 28	EO R	7	2.2
2050	17 59 15	-23 2.7	8	2.5		-1.67	-3.44			SHARP M 20	EO R	7	2.2
2051	17 59 56	-21 46.5	6	2.1		-1.12	-3.98				R	8	2.2
2052	18 0 39	-24 20.8	8	2.5		-3.40	-6.31			M 8	EO R	6	2.2
2053	18 0 53	-24 5.1	8	2.5	1.16	-1.54					6	-1	2.2
2054	18 0 59	-20 18.9	8	2.0	-0.3	-2.95	-3.73	-20424		1.232	10	1	2.2
2055	18 1 7	-16 57.4	9	2.8	1.43			-20425			12	2	2.2
2056	18 1 9	19 33.8	9	2.1	1.23	-1.22		20346		DO 16410	46	15	1.1
2057	18 1 22	8 26.6	17	3.7							35	14	1.1
2058	18 1 30	-8 37.0	8	3.5	.77						20	6	1.2
2059	18 1 48	-24 29.8	8	2.5	1.36	-1.36	-3.20			V1807 SGR	6	-1	2.2
2060	18 1 49	-8 2.0	9	3.7	.37						20	7	1.2
2061	18 1 53	-28 6.7	9	3.8	.65	-1.54		-30350		V16045GR	3	-3	1.2
2062	18 2 37	-21 13.4	8	2.1	1.41	-1.51	-3.27	-20427		5.138	9	-0	2.2
2063	18 2 55	-20 49.1	7	1.7	1.32	-1.90					9	0	1.2
2064	18 3 46	22 14.1	17	2.9	-0.7	-1.62		20348	6765	98 MER	49	20	1.1
2065	18 3 53	-8 14.3	8	2.5	.50	-1.05		-10395			20	6	2.2
2066	18 4 0	-4 53.9	7	2.2	1.41		-2.43	337			23	8	2.2
2067	18 4 4	-9 41.8	8	2.1	.22	-2.00		-10396			19	5	2.2
2068	18 4 26	62 57.2	22	1.8	1.16			60256		DO 36063	92	29	3.3
2069	18 4 28	-29 25.2	8	3.5	1.06	-1.25		-30358			2	-4	1.1
2070	18 4 47	6 33.7	16	3.8	1.11	-1.70		10349		DO 4593	34	13	1.1
2071	18 5 0	-22 15.6	8	2.5	-1.89	-4.90	-5.78	-20431		VX SGR	8	-1	2.2
2072	18 5 23	43 27.3	12	1.8	.80			40308		DO 36062	71	26	2.2
2073	18 5 26	-20 1.8	8	2.4	1.54	-1.17		-20433			10	-0	2.2
2074	18 6 1	-18 13.2	8	2.6		-1.09				SHARP 38	12	1	2.2
2075	18 6 8	5 17.6	10	2.4	.99			10351		AV OPH	33	12	1.1
2076	18 6 12	-27 40.7	8	1.8	.41	-1.69		-30364			4	-4	1.1
2077	18 6 15	42 13.5	12	1.4	.57	-1.85		40312		V529 MER	69	26	2.2
2078	18 6 23	-20 19.2	8	2.4		-3.31	-6.20			HFE 49	10	-0	2.2
2079	18 6 24	-23 6.3	15	3.6	.92			-20437			8	-2	1.2
2080	18 6 59	-24 7.4	8	2.5		-1.40				N 6559	7	-2	2.2

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	H	M	S												
2081	18 7 5	-23 34.7	7	3.2		-1.38	*				0	0			
2082	18 7 23	-26 52.0	8	2.4	1.21			-30365		V1280 SGR	7	-2			1.2
2083	18 7 38	-10 33.5	8	2.7	1.17	-1.28	-2.95	-10401			5	-4			2.2
2084	18 7 43	-7 17.2	7	2.2	1.63			-10402			19	4			2.2
2085	18 7 53	-20 24.5	8	2.4	1.14	-1.08					22	5			2.2
2086	18 8 24	-26 29.0	7	3.0	.81	-2.49	*				10	-1			2.2
2087	18 9 6	-18 53.6	8	2.5	.94	-.85		-20444		1.240	EO A	5	-4		1.2
2088	18 9 11	-4 35.8	16	3.6		-1.63	-2.46				12	-0			2.2
2089	18 9 52	31 24.5	19	2.5	.03	-.07		30328	6815	104 ME <sup>0</sup>	24	7			1.1
2090	18 11 15	-17 57.7	8	2.5		-2.45	-5.43			HFE 50	58	22			1.1
2091	18 11 15	-12 39.7	16	3.7	1.36						EO R	13	-0		2.2
2092	18 11 18	-21 43.1	8	2.5	1.40	-1.59	-3.17	-20451	6816	DO 4656	17	2			1.2
2093	18 11 19	-6 15.5	16	3.7		-.45					9	-2			2.2
2094	18 11 47	-16 49.2	8	2.8		-1.56	-3.79				34	11			1.1
2095	18 11 50	32 37.5	19	2.7	.76	-1.54					R	14	0		2.2
2096	18 12 1	-22 47.8	8	2.5	1.84	-1.61					60	22			1.2
2097	18 12 33	15 34.9	12	2.2	.85	-.79		20354			9	-3			2.2
2098	18 12 38	30 9.4	18	2.7	.77			30330		DO 16595	43	15			2.2
2099	18 12 56	25 5.9	17	3.2			-2.92			DO 16596	57	21			1.1
2100	18 13 22	27 33.5	18	2.3	1.71						53	19			1.1
2101	18 13 26	-16 51.7	15	4.1		-2.08	-3.14				55	20			1.1
2102	18 13 28	-17 40.6	8	2.6	.78	-1.55	-3.18	-20455		5.140	14	-0			1.2
2103	18 13 50	-16 42.4	7	2.2	.27	-2.35	-2.99	-20454		3.45	13	-1			2.2
2104	18 13 42	-18 59.9	8	2.5	1.04	-1.29	-3.20				R	14	-0		2.2
2105	18 13 43	-16 12.0	16	3.7		-.41	-4.10				A	12	-1		2.2
2106	18 13 48	2 18.4	16	3.8	.69			343	6834	DO 4686	R	15	0		1.2
2107	18 13 58	-18 40.8	6	2.0		-.82	-3.83			SHARP. 39	31	9			1.1
2109	18 14 8	-16 27.4	8	2.8		-1.27	*				R	12	-1		2.2
2110	18 14 42	-22 15.1	8	2.5	1.73	-1.61				HFE 51	14	-0			2.2
2111	18 14 57	36 42.8	20	2.7	1.21	-.65					9	-3			2.2
2112	18 15 0	-26 59.7	7	3.1	.57		*				64	22			1.2
2113	18 15 5	-11 46.5	8	2.5		-2.15	-3.90	-30374	6842		5	-5			1.1
2114	18 15 32	-13 28.4	7	2.1	1.02			-10409		N 6604	EO R	19	2		2.2
2115	18 15 36	-15 21.5	8	2.8	.83	-.41		-20461		ES SER	17	1			2.2
2116	18 15 40	17 58.9	10	2.0							16	0			2.2
2117	18 15 43	-13 46.2	8	2.7	-.17	-1.07	-5.40	20356		10 HER	46	15			2.2
2118	18 15 47	-6 54.9	16	3.6	.85	-1.99				M 16	17	1			2.2
2119	18 16 7	-13 57.9	7	1.8		-1.98	-2.63			EV SER	23	4			1.1
2120	18 16 10	-11 41.9	8	2.5		-1.11	-2.98			CV SER	17	1			1.2
											R	19	2		2.2

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	H M S	O	S								O	O	
2121	18 16 18	-20 45.1	7	3.4			-3.31	-20463			11	-3	1-2
2122	18 16 25	-15 48.2	8	2.5	.84	-1.36		-10410			15	-0	2-2
2123	18 17 5	-12 20.6	8	2.5	.99	.45					18	1	2-2
2124	18 17 37	-16 12.6	8	2.4	.10	<-5.79	-8.24	-20466		M 17	15	-1	2-2
2125	18 17 38	-14 9.9	8	2.7	1.33			-10411		3.57	17	0	2-2
2126	18 17 47	-29 49.4	8	3.4	.05	.94	*	-30376	6859	DEL SGR	3	-7	1-1
2127	18 17 55	-13 48.2	8	2.7	.84	-1.17		-10412			17	0	2-2
2128	18 18 14	21 56.8	10	1.9	.68	.74		20361	6868	106 HER	50	16	2-2
2129	18 18 18	36 1.5	13	1.9	.92			40313	6872	KAP LVR	64	22	2-3
2130	18 18 20	25 49.1	17	3.2	1.20			30333		DO 16684	53	18	1-2
2131	18 18 22	-24 53.3	8	2.6	.33			-20468	6861	SVS 101720	7	-5	2-2
2132	18 18 30	-13 4.2	6	1.5	1.70	-1.98	-4.31			MWC 922	18	1	2-2
2133	18 18 31	31 43.1	9	1.4	.18	.98		30334		TU LVR	59	20	3-3
2134	18 18 46	-2 53.8	9	2.6	.88			347	6869	ETA SER	27	5	2-2
2135	18 19 32	-27 3.8	7	3.1	1.51	-2.29	*			A	6	-6	1-1
2136	18 19 34	-13 31.9	8	2.6		-1.59	-3.66			A	18	0	2-2
2137	18 20 3	23 15.7	12	2.0	.89			20362	6882		51	17	2-2
2138	18 20 21	49 6.3	10	1.3	.40			50279	6891	DO 36186	77	25	3-3
2139	18 20 25	-13 42.9	8	2.7	.09	-2.89	-3.33	-10414			18	-0	2-2
2140	18 20 29	50 42.4	19	2.1			-2.44				79	25	2-3
2141	18 20 50	-4 30.5	9	2.6	1.50			348			26	4	2-2
2142	18 21 28	3 35.8	10	2.5	.91	.90	-3.23			SVS 4075	33	8	1-1
2143	18 21 33	-16 15.4	8	2.4	1.66	-1.38	-3.31				15	-2	2-2
2144	18 21 33	72 41.6	38	2.1	1.68			70144	6927	CHI CRA	103	28	2-3
2145	18 21 34	21 43.7	10	1.9	.87	-1.65		20364	6895	109 HER	50	16	2-2
2146	18 21 43	33 24.7	13	1.8		-1.42					61	20	2-3
2147	18 22 7	-13 17.6	8	2.6	2.04	-2.35	-3.76			W SCT	18	-0	2-2
2148	18 22 13	39 33.1	10	1.4	1.13	.06		40315		TW LVR	67	22	3-3
2149	18 22 16	-20 31.0	15	3.6	1.08		-3.32	-20478	6896	21 SGR	12	-4	1-2
2150	18 23 7	5 43.8	10	2.5	.94	-1.41					35	8	1-1
2151	18 23 27	-22 5.5	8	2.0	.59	-1.41		-20482			11	-5	2-2
2152	18 23 39	-11 51.3	8	2.4		-1.57					20	0	2-2
2153	18 23 51	-12 26.5	16	3.6		.83	-3.62			EO R	19	-0	1-2
2154	18 23 52	-6 55.5	9	2.5	.65	-1.92	-2.76			MWC 930	24	2	2-2
2155	18 24 8	23 27.0	12	2.0	1.19	-2.62	-3.20			DO 16893	52	16	2-2
2156	18 24 16	3 55.0	16	3.7	.38			350		V968 OPH	34	7	1-1
2157	18 24 23	-12 41.7	8	2.5		-1.56	-2.95			W 39	19	-0	2-2
2158	18 24 32	1 6.7	10	2.5	1.16			351		OO 4822	31	6	1-1
2159	18 24 35	7 31.2	16	3.4	.89			10357		V505 OPH	37	9	1-1
2160	18 24 40	10 50.6	16	3.4			-3.13				40	10	1-1

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	H M S	O	S												
2161	18 24 48	-11 59.6	8	2.4		-1.01	-3.70			EO SCT	R	20	-0		2-2
2162	18 24 48	-12 28.6	8	2.5	-0.1	-2.26	-2.99	-10422		UY SCT	EO	19	-0		2-2
2163	18 24 54	-25 26.6	7	3.4	.51			-30386	6913	LAM SGR		8	-7		1-1
2164	18 24 59	-8 42.5	8	2.0	1.07	-.95		-10424				23	1		2-2
2165	18 24 59	-3 51.5	9	2.5	.77	-2.18	-3.14			SHARP. 62		27	4		2-2
2166	18 25 11	-13 4.1	8	2.5	1.18	-1.02		-10425				19	-1		2-2
2167	18 26 3	-17 45.9	8	2.5	.64			-20487				15	-3		2-2
2168	18 26 16	-11 34.5	8	1.9	1.26	-1.10	-2.61	-10426				20	-0		2-2
2169	18 26 30	-0 55.7	6	2.1		-2.27	-3.84			R		21	-0		2-2
2170	18 26 38	-6 6.3	15	3.8		-1.43				M <sub>W</sub> C 300		25	2		1-1
2171	18 27 6	82 36.0	65	2.4	1.51	-1.17	-3.08			SVS 4271		115	28		5-5
2172	18 27 32	24 19.7	17	2.7	1.33							53	15		1-2
2173	18 27 44	-1 24.2	16	3.5	1.40							29	4		1-1
2174	18 28 19	-9 45.0	8	2.0	1.43	-1.22	-2.96			SHARP. 56	AR	22	0		2-2
2175	18 28 21	27 4.3	13	1.7		-.94						55	16		2-3
2176	18 28 45	12 49.6	16	3.3			-3.14			DO 4879		42	10		1-1
2177	10 28 47	-2 7.5	8	2.0	1.63	-2.84	-5.54			W 40	EO	29	4		2-2
2178	18 28 51	-8 38.2	6	2.4	.62	-2.39				SHARP. 58	A	23	0		2-2
2179	18 28 56	-10 .3	7	3.4	1.01	-.32	*				A	22	-0		1-2
2180	18 28 56	4 20.7	16	3.6	1.06			353		TY OPH		35	6		1-1
2181	18 28 57	38 35.6	11	1.4	1.20	-1.16		40320		KP LYR		67	20		3-3
2182	18 29 48	-14 53.3	8	2.7	.93			-10433	6959			18	-3		2-2
2183	18 30 8	23 11.5	9	2.0		-.92	-2.42					52	14		1-2
2184	18 30 10	86 39.5	245	5.6	1.34					DO 36561		119	28		2-6
2185	18 30 26	-7 30.1	6	2.1	1.53	-1.18		-10434				24	1		2-2
2186	18 30 38	-14 10.8	8	2.7	1.18	-1.13		-10435				18	-3		2-2
2187	18 30 40	36 58.5	10	1.5	-.44	-1.45		40321		T LYR		65	19		3-3
2188	18 30 53	-9 10.8	8	2.5		-.89					R	23	-0		2-2
2189	18 31 23	14 12.1	17	3.2	.47						R	44	10		1-1
2190	18 31 27	-7 20.9	16	3.5		-1.99	-3.96				R	24	0		1-1
2191	18 31 33	-21 3.5	6	3.3	1.49		*					12	-6		1-2
2192	18 31 38	-11 33.3	9	2.4	1.29	-1.65					A	21	-2		2-2
2193	18 31 46	-8 45.1	7	3.4		-.99	-2.66			W 41	EO	23	-0		1-2
2194	18 31 49	-7 59.3	16	3.7		-1.10	-3.44				R	24	0		1-1
2195	18 32 2	-8 36.1	16	3.5	1.71	-.60	-3.46				R	23	-0		1-2
2196	18 32 27	-19 18.7	8	2.7	.70		-3.59			V1692 SGR		14	-5		2-2
2197	18 32 28	-8 15.6	9	2.1	.85	-.49		-10438	6973	ALF SCT		24	-0		1-1
2198	18 33 11	51 41.9	16	1.7	1.18			50282		DO 36350		81	24		2-3
2199	18 33 12	5 34.2	16	3.7	1.81	-1.38	-3.24				A	36	6		1-1
2200	18 33 30	-7 11.8	16	3.5			-4.37				R	25	0		1-1

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	H M S	O .	S								O	O			
2201	18 33 50	-19 58.1	8	2.4	1.35	-1.38	-3.48	-20500			14	-6	2-2		
2202	18 33 51	-7 23.4	16	3.6		-1.15	-3.00	-10441		RX SCT	25	-0	1-1		
2203	18 34 14	-7 38.3	6	2.1	1.01	-1.48		359		CZ SER	29	2	2-2		
2204	18 34 44	-2 43.1	8	2.5	.46	-1.46	-3.91			A	27	1	2-2		
2205	18 34 47	-5 27.7	8	2.6											
2206	18 34 48	10 24.7	16	3.4	.45	-3.01	-4.09	10365		V1111 GPH	41	8	1-1		
2207	18 35 7	-6 23.0	10	2.4	-1.33	-1.53	-3.09			R	26	0	1-1		
2208	18 35 13	38 43.4	8	1.2	.31	.54		40322	7001	ALF LVR	67	19	3-3		
2209	18 35 15	-12 22.4	8	2.4	1.57	-2.88	-6.08	-10443		EW SCT	20	-3	2-2		
2210	18 35 33	-6 50.9	8	2.4						EO R	25	-0	2-2		
2211	18 35 37	-5 32.8	8	2.6	1.76	-1.89				R	27	0	2-2		
2212	18 35 57	22 38.9	12	2.0	1.25	-1.13	-2.97	20364		DO 16914	22	13	2-3		
2213	18 36 3	8 47.0	10	2.5	-1.33	-1.96		10366	7002	X GPH	39	7	1-1		
2214	18 36 8	-13 50.1	10	2.3	1.44	-1.46		-10446			19	-4	1-2		
2215	18 36 8	-15 4.3	14	3.9	1.22			-20505			18	-4	1-2		
2216	18 36 18	-5 20.8	8	3.6	1.56	-1.47					27	0	1-2		
2217	18 36 28	39 37.6	11	1.4	.56	-1.13		40323	7009	XY LVR	68	19	3-3		
2218	18 36 34	18 23.2	9	2.3	1.18			20369		DO 16917	48	11	1-1		
2219	18 37 0	11 48.5	17	3.3	.96			10367		V515 OPH	42	8	1-1		
2220	18 37 10	-7 43.0	8	2.5	1.44			-10449	7007		25	-1	2-2		
2221	18 37 13	-19 40.8	7	3.6		-1.71	-3.80				14	-6	1-2		
2222	18 37 31	-0 23.6	15	3.7		-1.90	-2.93	-10451		3.511	31	2	1-1		
2223	18 37 32	-5 45.5	8	2.6	.76					R	27	-0	2-2		
2224	18 37 53	-25 46.8	6	2.9	1.26			40324			9	-9	1-1		
2225	18 38 3	40 17.8	14	1.7	1.20	-1.91				DO 16943	69	19	2-3		
2226	18 38 19	-5 42.6	8	2.6		-1.18		-10452			27	-0	2-2		
2227	18 38 47	-4 23.2	8	2.5	.67	-2.16	-3.66			DO 5003	28	0	2-2		
2228	18 39 23	28 46.2	13	2.0	1.50			30339		SV LVR	58	15	2-3		
2229	18 39 29	-5 4.9	9	2.4	1.55	-1.28		-10454		1.266	27	-C	2-2		
2230	18 39 31	-2 49.6	8	2.5	1.20			364			29	1	2-2		
2231	18 39 36	74 17.7	37	1.6	1.56			70146		RS DRA	105	27	2-3		
2232	18 39 39	17 38.6	17	3.1	-1.66	-3.72	-3.85	20370		EO	48	10	1-1		
2233	18 39 53	-2 21.2	8	2.0	.87	-3.31	-3.52	365		2.176	30	1	2-2		
2234	18 39 54	-2 7.7	16	3.3			-3.04			DO 5033	30	1	1-1		
2235	18 40 4	-19 20.3	8	2.7	.39	-1.58		-20510	7023		15	-7	2-2		
2236	18 40 4	28 55.4	7	1.5	.38	-1.61		30340		FI LVR	58	15	2-3		
2237	18 40 10	-4 36.0	9	2.5	1.51		-3.70			SVS 4316	28	-0	2-2		
2238	18 40 24	-3 36.3	16	3.4						DO 5046	29	0	1-1		
2239	18 40 46	12 21.4	16	3.4	1.38	-1.21		10373		KX HER	43	7	1-1		
2240	18 41 8	36 55.2	10	1.4	.92	-1.98		40325		MK LVR	66	18	3-3		

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	H M S	O	S								O	O			
2241	18 41 11	13 54.8	10	2.4	-1.10	-2.70	-3.09	10374			45	8	1-1		
2242	18 41 41	32 37.5	13	1.8		-1.46	-3.16			FT SCT	62	16	2-3		
2243	18 41 43	-4 23.3	9	2.5		-1.03	-4.00				28	-0	2-2		
2244	18 43 2	-19 38.6	7	1.7	.15	-1.15		-20515	7045	HFE 56	15	-8	1-2		
2245	18 43 23	-2 42.4	10	2.4	1.04	-2.16	-5.09				30	-0	1-1		
2246	18 43 40	43 34.8	14	1.7	1.07	-1.05		40328		RH LYR	73	19	2-3		
2247	18 44 7	26 38.0	10	1.5	1.54			30342	7064		57	13	2-3		
2248	18 44 27	-4 47.8	9	2.5	1.07	-.85		376	7063	BET SCT	28	-1	2-2		
2249	18 44 40	-2 24.4	16	3.5			-3.17				30	-0	1-1		
2250	18 44 56	-12 21.5	8	2.4	1.64			-10462			22	-5	2-2		
2251	18 45 2	-2 3.0	9	2.4	1.70	-3.03	-5.97	377		AB AQL	31	-0	2-2		
2252	18 45 4	-9 21.6	8	2.5	1.50	-1.40					24	-3	2-2		
2253	18 45 30	-19 55.6	7	3.7	1.40						15	-8	1-1		
2254	18 45 40	-2 3.6	9	2.4	1.49	-.27		379			31	-0	2-2		
2255	18 46 10	-9 40.0	7	3.5	1.61						24	-4	1-2		
2256	18 46 38	-6 58.4	16	3.5		-1.85					27	-3	1-1		
2257	18 46 39	-2 30.9	9	2.5		-.66				SHARP. 67	30	-1	2-2		
2258	18 47 9	-1 32.0	16	3.3	1.61		-3.35	381		DO 5126	31	-0	1-1		
2259	18 47 22	9 28.8	15	3.4		-1.75					41	5	1-1		
2260	18 47 38	-7 57.6	6	1.5	-.07	-1.21		-10467	7089	S SCT	26	-3	2-2		
2261	18 48 0	47 28.0	11	1.4	.47	-1.45		50284		DO 36528	77	20	3-3		
2262	18 48 5	-6 45.4	9	2.5	1.85			-10469		AI SCT	27	-3	2-2		
2263	18 48 18	23 43.8	12	1.9	1.70			20379		DO 17095	54	11	2-2		
2264	18 48 58	-29 4.6	7	3.3	1.42					NZ SGR	7	-13	1-1		
2265	18 49 5	-1 36.3	16	3.3	1.60						32	-1	1-1		
2266	18 49 35	12 7.5	16	3.4	1.58	-1.07				LO HER	44	5	1-1		
2267	18 49 45	-3 47.8	9	2.5	1.28			385		DO 5155	30	-2	2-2		
2268	18 49 50	-5 23.2	7	2.2	1.09			-10471		LP SCT	28	-3	2-2		
2269	18 49 56	46 41.3	14	1.8	1.46			50285		DO 36566	76	19	2-3		
2270	18 50 9	-21 33.1	7	3.3	.51	-.55		-20524		SVS 4423	14	-10	1-1		
2271	18 50 49	1 10.7	10	2.3		-2.23	-4.62				34	0	1-1		
2272	18 51 14	0 36.2	10	2.4	.96	-1.83		389		V802 AQL	34	-0	1-1		
2273	18 51 15	30 37.9	13	1.9	1.74			30345			61	13	2-3		
2274	18 51 37	40 57.5	12	1.3	.24	-.63		40329		DO 36593	71	17	3-3		
2275	18 52 2	-16 35.1	6	1.5	.08	-.83		-20527		UX SGR	19	-8	2-2		
2276	18 52 17	10 34.1	16	3.2	.31			10384		V913 AQL	43	4	1-1		
2277	18 52 25	41 26.3	15	1.6		-.72	-3.09				71	17	2-3		
2278	18 52 40	36 51.4	10	1.4	-1.46	-1.83	-2.14	40331	7139	DEL2 LYR	67	15	3-3		
2279	18 52 53	42 25.9	14	1.6	1.41			40332		DO 36611	72	17	2-3		
2280	18 53 10	-11 4.8	8	3.5	1.16			-10477		RB SCT	24	-6	1-2		



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	<sup>H</sup> <sub>M</sub> S	<sup>O</sup> <sub>'</sub>	<sup>S</sup> <sub>'</sub>								<sup>O</sup> <sub>'</sub>				
2281	18 53 13	-4 50 0	9 2 5		1.74			394		RM SCT	29	-3			2-2
2282	18 53 42	-10 56 3	8 2 6		.41	.58		-10479		RG DRA	24	-6			2-2
2283	18 53 42	51 27 4	16 1 7			-1.18				SHARP. 76	81	20			2-3
2284	18 53 49	7 49 6	16 3 1			-1.18	-4.00			R LVR	41	3			1-1
2285	18 53 57	43 53 0	12 1 4		-2.32	-2.31	-2.46	40334	7157		74	19			3-3
2286	18 54 47	-21 11 0	7 3 4		.65	.53		-20530	7150		15	-11			1-1
2287	18 55 16	3 22 9	16 3 4			-1.15				DO 5230	37	0			1-1
2288	18 55 44	4 37 5	9 2 3		.90	-1.27	-2.36	402		V966 SCR	38	1			1-1
2289	18 56 3	-29 55 2	8 3 5		-.29	-3.38		-30396			7	-15			1-1
2290	18 56 8	6 38 6	15 3 5		.54	-2.50	-3.98			EO	40	1			1-1
2291	18 56 12	12 56 1	11 2 2		1.13	-2.15		10388		V490 AOL	45	4			2-2
2292	18 56 26	14 19 0	16 2 9		.55			10389		UV AOL	47	5			1-2
2293	18 56 28	-19 15 7	7 3 7		.49			-20532			17	-10			1-1
2294	18 56 34	25 11 5	12 2 0		1.66			30348		DO 17253	50	10			2-2
2295	18 57 4	-6 56 2	16 3 2		1.32						28	5			1-1
2296	18 57 10	5 16 0	15 3 5		1.22			10391		V492 AOL	39	1			1-1
2297	18 57 58	22 44 5	17 2 8		.89		-3.17	20382	7183	DO 17275	54	8			1-2
2298	18 58 0	3 39 6	16 3 4								37	0			1-1
2299	18 58 32	16 49 1	16 3 3		-.09			-10482		DO 17282	49	6			1-2
2300	18 58 45	-12 50 7	9 2 4		.89					ST SCR	23	-8			2-2
2301	18 58 47	40 35 6	10 1 2		.82			40336	7201	DO 17295	71	16			3-3
2302	18 58 59	-5 50 9	8 2 6		1.06			-10483	7193	12 AOL	29	-5			2-2
2303	18 59 12	4 10 2	16 3 4				-3.10				38	0			1-1
2304	18 59 21	1 7 7	16 3 4			-1.72	-4.93			V. 48	35	-2			1-1
2305	19 0 5	8 25 3	16 3 2		.99			10399		DO 5287	42	1			1-1
2306	19 0 9	22 45 5	17 2 8		1.53		-2.26				55	8			1-2
2307	19 0 17	25 15 9	12 2 0			-2.12				DO 17313	57	9			2-2
2308	19 0 36	20 39 6	12 2 1		1.65			20384		4N VUL	53	7			2-2
2309	19 0 42	-22 45 5	8 3 4		-.66	-1.46		-20534		DO 17325	14	-13			1-1
2310	19 0 43	7 27 6	16 3 1		-.43	-2.64		10401		SU SCR	41	1			1-1
2311	19 0 50	9 53 6	9 2 2				-3.85			2.181	43	2			1-2
2312	19 0 57	12 9 5	11 2 2		1.21			10400		V915 AOL	45	3			2-2
2313	19 1 11	5 26 7	10 2 3		1.22	-1.11	.72				39	-0			1-1
2314	19 1 39	-5 46 4	8 2 6		-.83	-1.58		-10486	7220	V AOL	29	-5			2-2
2315	19 1 58	-13 50 2	15 3 8		1.53						22	-9			1-2
2316	19 2 54	8 9 8	16 3 2		1.66	-1.91				DO 5325	42	1			1-2
2317	19 3 8	30 40 6	10 1 5		1.22			30354	7238	DO 17382	62	11			3-3
2318	19 3 13	20 16 4	17 3 0		1.29	-.98					53	6			1-2
2319	19 3 17	27 2 3	13 1 7		.40	-.75		30355		DO 17384	59	9			2-2
2320	19 3 25	39 36 2	14 1 6			-.51					70	14			2-3

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	H M S	O	S								O	O	
2321	19 3 47	6 28.7	15	3.5	1.50						40	0	1-1
2322	19 3 50	29 49.9	13	1.8	1.67					DO 17399	61	10	2-3
2323	19 3 51	-27 45.7	9	3.8	.73			30357	7244	TAU SGR	9	-15	1-1
2324	19 4 9	8 8.2	11	2.2	-1.43	-2.40	-3.16	-30401	7234	R AQL	42	0	2-2
2325	19 4 19	10 40.0	9	2.2	1.45		-3.27	10406	7243		44	2	1-2
2326	19 4 30	7 4.2	9	2.1	.34			10407		V844 AQL	41	0	2-2
2327	19 4 43	-17 4.8	9	3.6	.85	-1.17	-2.92	-20538		FO SGR	19	-11	1-1
2328	19 5 30	-12 45.3	16	3.3	1.63						23	-9	1-2
2329	19 5 40	6 12.6	16	3.5	-1.14	-.87		10408		V347 AQL	40	-1	1-2
2330	19 5 56	-22 16.8	8	3.4	1.22	-1.89		-20540			15	-14	1-1
2331	19 6 31	39 4.3	8	1.2	.41	-.76		40338		DO 17453	70	14	3-3
2332	19 7 7	40 41.7	14	1.5		-1.04					72	14	2-3
2333	19 7 30	9 21.9	10	2.3		-2.25	-3.18				43	0	1-2
2334	19 7 55	9 1.6	11	2.4	1.70	-2.60	-5.61			HFE 58	R	43	-0
2335	19 8 8	-15 9.2	9	3.8	1.08			-20543			22	-11	1-1
2336	19 8 51	11 50.4	16	3.0			-5.60				46	1	1-2
2337	19 9 24	10 3.6	11	2.3		-1.09					44	0	2-2
2338	19 10 0	66 .7	19	1.6	.64	-1.29		70148		SZ DRA	97	23	3-3
2339	19 10 15	67 12.2	26	1.4	1.57			70149		U DRA	98	23	2-3
2340	19 10 49	18 38.8	9	2.0	1.53	-1.74	-3.62				52	4	1-2
2341	19 11 0	10 47.6	7	1.6		-2.37	-5.19			AR	45	0	2-2
2342	19 11 4	25 55.6	12	2.2	1.45	-.37				S LVR	59	7	2-2
2343	19 11 23	0 3.5	9	2.2		-1.71	-3.88				36	-5	1-1
2344	19 11 28	27 39.9	17	3.1	1.46					EI LVR	60	8	1-2
2345	19 12 0	11 4.9	11	2.2		-1.99	-4.36			EO R	45	0	2-2
2346	19 12 1	46 53.3	13	1.6	1.16			50289		SS LVR	78	16	3-3
2347	19 12 20	-8 35.5	9	2.4		-.92					28	-9	2-2
2348	19 12 40	67 33.8	22	1.1	.74			70150	7310	DEL DRA	99	23	3-3
2349	19 12 40	-7 8.3	9	2.4	-1.59	-3.94	-4.52	-10497		W AQL	29	-9	2-2
2350	19 13 25	9 32.2	9	2.0	.77	-2.57	-3.19			A	44	-1	2-2
2351	19 13 26	30 26.2	13	1.8	1.40			30364	7302	DO 17571	63	9	2-2
2352	19 13 37	-10 7.4	15	3.7	1.75						27	-10	1-2
2353	19 13 50	-19 25.4	8	3.8	1.27			-20549		R SGR	18	-14	1-1
2354	19 14 9	-8 24.1	9	3.5		-.51				OW LVR	28	-9	1-2
2355	19 14 9	34 35.3	13	1.7			-2.89				67	10	2-3
2356	19 14 16	67 26.8	27	1.3	1.48	-.93		70152		THET LVR	99	23	2-3
2357	19 14 33	38 2.4	10	1.2	1.49	-.82	-3.30	40341	7314	CG VUL	70	12	3-3
2358	19 14 37	21 48.7	12	2.0	.77	-.48		20393		DO 5557	55	5	2-2
2359	19 15 13	11 50.5	11	2.2		-.89	-3.02			AR	47	-0	2-2
2360	19 15 15	12 4.2	11	2.2	1.24		-2.40	10415		DO 5563	47	-0	2-2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	I	B	V
	H M S	O	S											
2361	19 15 53	-17 8.5	10	3.6	.99	-1.32	.				R	21	-14	1.1
2362	19 15 56	23 41.8	17	2.6		-1.34	-3.14					27	5	1.2
2363	19 16 18	-15 58.2	9	3.5	.72	-.81	.	-20554		V1942 SGR		22	-13	1.0
2364	19 16 30	73 16.1	35	1.9	1.64			70153	7352	SV5 101827		105	24	1.4
2365	19 16 46	3 18.8	11	2.3	1.58			423		ER AOL		39	-5	1.2
2366	19 17 33	22 28.5	10	1.7	.11	-.72		20398		DO 17637		56	4	1.2
2367	19 17 36	22 57.1	12	1.9	1.02			20397		DO 17636		57	4	1.2
2368	19 17 36	-8 6.2	7	2.1	.79	-3.10	-3.60	-10502				29	-10	1.2
2369	19 17 43	-10 42.8	10	3.9	.53		.	-10503				27	-11	1.1
2370	19 17 50	-26 16.7	7	1.6	1.45	-2.18	.			V895 SGR	A	12	-18	1.1
2371	19 18 13	13 48.9	11	2.2		-1.02	-3.44				R	49	0	1.2
2372	19 18 17	40 41.1	11	1.2	1.67		.	40344		DO 37124		73	12	1.2
2373	19 18 50	-16 .7	10	3.5	.97	-1.06	.	-20558	7342	UPS SGR		22	-14	1.1
2374	19 19 20	9 23.1	11	2.4		-1.49	-2.52					45	-2	1.2
2375	19 19 25	17 34.1	10	1.8	-.16	-1.51		20399		T SGE		52	2	1.2
2376	19 20 7	13 58.6	11	2.2	1.36	-2.09	-5.19			HFE 59	EO R	49	-0	1.2
2377	19 20 26	7 20.2	11	2.1		-.58	.			V1126 AOL		43	-1	1.2
2378	19 20 39	14 23.0	16	3.0		-1.75	-4.61				R	49	-0	1.2
2379	19 20 45	14 8.8	11	2.1		-1.96	-4.08				EO R	49	-0	1.2
2380	19 20 52	14 47.7	9	1.8		-1.43	-3.07					50	-0	1.2
2381	19 21 26	14 24.4	11	2.1	1.62	-3.47	-6.84			HFE 60	EO R	49	-0	1.2
2382	19 22 17	-13 28.9	10	3.6	1.26		.	-10511				22	-13	1.1
2383	19 23 11	50 9.4	14	1.2	-1.45	-2.75	-3.43	50294		CH CYG		92	15	1.2
2384	19 23 12	76 27.6	41	2.2	-.11	-.74		80036		UX DRA		108	25	1.4
2385	19 23 21	53 32.0	14	1.6		-.76				N 6798		95	17	1.2
2386	19 23 42	60 55.5	21	1.4	1.71		-2.73					92	30	1.2
2387	19 23 45	65 33.2	31	2.4	1.77			70155		DO 37260		97	31	1.2
2388	19 23 49	71 35.5	29	1.9	1.60		-2.29	70156		YZ DRA		103	23	1.2
2389	19 24 14	36 6.4	11	1.7	1.45			40347		DO 17754		69	18	1.2
2390	19 24 31	11 15.8	9	1.9	.16	-4.47	-6.29	10420		DO 5752		47	-3	1.2
2391	19 24 51	-17 25.2	9	3.6	.32	-1.37		-20563				21	-5	1.1
2392	19 24 55	6 58.0	16	3.5	.85	-1.14					A	43	-5	1.2
2393	19 25 40	33 25.1	18	2.2			-3.11					67	8	1.2
2394	19 26 17	12 45.4	16	3.2	1.31							49	-2	1.2
2395	19 26 41	24 32.5	12	1.9	.26	.02		20407	7405	ALF VUL		59	1	1.2
2396	19 27 12	45 56.8	11	1.4	1.15	-.80		50295		AW CYG		28	13	1.2
2397	19 27 21	13 55.9	16	3.0		-1.31						50	-2	1.2
2398	19 27 35	2 43.4	9	1.9	1.11		-3.63	437	7412	DO 5814		40	7	1.2
2399	19 27 37	15 29.5	17	3.0		-1.69						51	-1	1.2
2400	19 27 37	-0 56.6	7	1.8	.55	-1.19		438		V374 AOL		37	-9	1.2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	B	I	N
2401	19 28 6	29 5.5	17	2.7			-3.03				63	5	1-2	
2402	19 28 7	-2 54.1	7	1.5	.51	-3.13		439	7414	36 AOL	35	10	3-3	
2403	19 28 18	19 43.6	9	2.2	1.52	-1.29	-2.26	50296		DO 37347	55	1	1-2	
2404	19 28 27	48 53.9	13	1.3	1.25		-2.96				21	14	3-3	
2405	19 28 34	15 32.9	17	3.0							21	-1	1-2	
2406	19 28 36	27 51.3	10	1.8	.08	.46		30370	7417	BET CYG	62	5	2-2	
2407	19 28 53	46 2.7	15	1.8	.20	.99		50297		AF CYG	13	3	2-3	
2408	19 29 22	18 37.0	12	1.9		.26	-3.01				54	-3	2-2	
2409	19 23 41	43 31.3	12	1.7	.46	-1.38	-2.73	40348		UV CYG	76	12	2-3	
2410	19 30 4	13 15.2	16	3.2							49	-3	1-2	
2411	19 30 36	2 41.4	15	3.4			-2.95				40	-8	1-2	
2412	19 30 44	4 54.6	16	2.8	.52			443		SVS 4721	42	-7	1-2	
2413	19 30 56	13 35.9	11	2.2		-1.51	-3.08			SVS 4714	56	-3	2-2	
2414	19 31 12	23 32.0	12	1.9	.48			20413		EP VUL	59	2	2-2	
2415	19 31 22	5 21.7	7	1.6	.29			10428		V450 AOL	43	-7	2-2	
2416	19 31 28	-16 28.6	8	2.0	.21	.95		-20568		AQ SGR	23	-17	1-1	
2417	19 32 13	27 57.4	12	2.2	.38	-3.03	-2.94	30374			63	4	2-2	
2418	19 32 20	49 9.1	13	1.3	.36			50300	7442	DO 37447	82	14	3-3	
2419	19 33 9	72 49.4	41	3.0		-1.17					105	23	2-4	
2420	19 33 13	33 41.6	13	1.7	1.26			30376			68	7	2-2	
2421	19 34 53	12 2.6	16	3.2	1.34						49	-4	1-2	
2422	19 35 38	50 5.6	17	1.5	.83	-1.35	-2.58	50301		R CYG	93	14	2-3	
2423	19 35 39	11 37.0	9	1.9	.39	-1.61		10433		RT AOL	49	-5	2-2	
2424	19 35 41	69 41.2	20	1.6	.40		-3.57	70159		DO 37579	102	22	4-4	
2425	19 36 11	-16 57.5	10	3.8	1.55	-1.34	-2.96				23	-18	1-1	
2426	19 36 49	28 23.6	12	2.1	.38	.93		30379		BG CYG	63	3	2-2	
2427	19 37 47	36 2.6	19	2.9	1.24						70	7	1-2	
2428	19 38 9	33 15.7	10	1.5	1.07	.89					68	5	2-2	
2429	19 38 24	43 48.4	12	1.4	1.23			40355		V462 CYG	77	10	3-3	
2430	19 38 27	-4 .8	10	2.5	.83			448		DO 6039	35	-13	2-2	
2431	19 38 28	32 42.7	13	2.4	1.64						67	5	1-2	
2432	19 38 52	32 29.9	13	1.7	1.04			30382		IT CYG	67	5	2-2	
2433	19 38 58	39 56.2	14	1.8	1.66	-1.96	-1.88				74	8	2-3	
2434	19 39 3	17 20.6	16	3.1	1.09	.41		20427	7488	BET SGE	54	-3	1-2	
2435	19 39 4	42 58.5	14	1.7	1.29			40356	7492	DO 37608	77	10	2-3	
2436	19 39 37	48 41.1	17	1.5	1.82	.60		50304		V391 CYG	92	13	2-3	
2437	19 39 42	17 4.6	16	2.9			-4.24				54	-3	1-2	
2438	19 41 3	-7 53.6	16	3.2		-3.05	-2.60			EO	32	-15	1-2	
2439	19 41 7	55 21.3	16	1.3	.17	.87		60269	7509	DO 37652	98	15	3-3	
2440	19 41 12	3 37.1	11	2.2	1.21	-1.80		450			42	-10	2-2	

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L I I	B I I	N
	H M S	O	S										
2441	19 41 15	4 40.9	16	2.8	.		-2.93				0	0	1-2
2442	19 41 45	43 20.8	15	1.7		-3.38	-3.74				43	-9	2-3
2443	19 41 48	34 22.4	11	1.6	1.19	-.99		30385		10 CYG	77	10	2-2
2444	19 42 14	32 23.3	19	2.5	1.11						69	5	2-2
2445	19 42 24	35 8.1	10	1.8	1.35	-1.73	-3.27				68	4	1-2
											70	6	2-2
2446	19 42 40	34 17.5	13	1.7	.59			30388	7520	SVS 101884	69	5	2-2
2447	19 42 52	33 15.4	16	2.0	1.55	-.39	-2.57			V969 CYG	68	5	1-2
2448	19 43 7	19 46.5	12	2.1	-.90						57	-2	2-2
2449	19 43 19	66 9.0	28	2.0	-1.56	-4.23					98	20	2-4
2450	19 43 20	40 35.7	14	1.5	1.15			40362	7523	V973 CYG	75	8	2-3
2451	19 43 27	31 21.3	13	1.7	1.52			30390		EQ CYG	67	3	2-2
2452	19 43 43	1 34.9	11	2.2	.97			451		DO 6155	41	-11	2-2
2453	19 43 58	10 29.1	11	2.2	-.79	-.92		10439	7525	GAM AQL	49	-7	2-2
2454	19 44 12	24 28.5	12	2.0	-1.60	-4.03				SHARP. 87	61	-0	2-2
2455	19 44 47	25 5.0	13	2.0	-2.20	-4.84					61	0	2-2
2456	19 45 8	18 25.2	12	1.9	-1.07	-1.09	-3.06	20433	7536	DEL SGE	56	-3	2-2
2457	19 46 4	23 46.6	17	2.7	-.33						61	-1	1-2
2458	19 46 5	3 36.0	9	1.9	1.09			453		X AQL	43	-11	2-2
2459	19 46 13	47 46.8	16	1.5	1.52	-1.32	-3.19	50309	7547	DO 37751	81	11	2-3
2460	19 47 9	26 43.2	10	1.6						SHARP. 90	63	0	2-2
2461	19 47 25	7 43.4	9	1.9	-.70	-3.03	-3.45	-10524		GY AQL	33	-16	2-2
2462	19 48 13	24 47.7	12	2.0	1.05	-1.52		20438		SVS 101897	62	-1	2-2
2463	19 48 19	8 44.4	11	2.1	.18			10441	7557	ALF AQL	48	-9	2-2
2464	19 48 35	70 9.9	25	1.5	1.15	-.48		70160	7582	EPS DRA	102	21	4-4
2465	19 48 37	32 47.3	13	1.7	-2.84	-3.78	-4.43	30395	7564	CHI CYG	69	3	2-2
2466	19 48 49	38 35.7	14	1.6	.29	-.54		40364	7566	19 CYG	74	6	2-2
2467	19 48 55	37 41.9	14	1.6	.43			40365	7568	NR CYG	73	6	2-2
2468	19 49 16	22 24.1	17	3.0		-1.03				EU CYG	60	-2	1-2
2469	19 49 24	32 35.2	19	2.4		-.84					68	3	1-2
2470	19 49 48	14 54.7	11	2.0	1.96	-.98					53	-6	2-2
2471	19 50 21	22 19.1	12	2.1	-.82	-2.08	-3.78	20439		SVS 4865	60	-2	2-2
2472	19 52 23	49 27.8	13	1.3	1.20	-.34	-2.91	50311		DO 37860	93	11	3-3
2473	19 53 0	23 15.2	12	2.0	1.64					HM VUL	61	-2	2-2
2474	19 53 46	22 14.1	17	3.0	.83						60	-3	1-2
2475	19 54 20	34 57.2	10	2.0	.92			30401	7615	ETA CYG	71	3	1-2
2476	19 54 44	58 43.2	13	1.2	.98	-.37		60274	7633	DO 37910	92	15	4-4
2477	19 54 47	30 36.2	10	1.7		-1.21	-2.84			V1170 CYG	57	1	2-2
2478	19 54 56	33 53.6	19	2.3	-1.50						70	3	1-2
2479	19 54 57	-2 .5	8	2.2	-.59	-2.56		458		RR AQL	39	-16	2-2
2480	19 55 37	44 8.8	12	1.4	.70			40368		AX CYG	79	8	3-3

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	H	M	S												
		O													
2481	19 55 43	-3 40.2	10	2.5	1.22		-2.96	459		KL CYG	37	-16			2-2
2482	19 55 57	33 1.2	10	1.6	1.38						70	2			2-2
2483	19 56 1	-13 41.2	15	3.7			-5.13				28	-21			1-2
2484	19 56 15	15 51.5	11	2.0	1.05			20444		V744 AOL	55	-7			2-2
2485	19 56 40	19 20.8	11	2.1	-1.40			20445	7635	GAM SGE	58	-5			2-2
2486	19 57 43	17 22.8	11	2.1	.04			20446	7645	VZ SGE	55	-6			2-2
2487	19 57 43	-13 40.1	11	4.0	-1.41						28	-21			1-2
2488	19 58 33	36 38.3	13	1.8	1.74			40371			73	4			2-2
2489	19 58 42	-10 5.7	15	3.6			-3.12				32	-20			1-2
2490	19 58 43	52 .3	12	1.1	.10			50312		SVS 101929	86	11			3-3
2491	19 58 54	36 59.0	14	1.8	1.45			40370		DO 18446	73	4			2-2
2492	19 59 2	33 3.2	19	2.4			-3.47			R	70	2			1-2
2493	19 59 21	33 47.2	7	1.4	1.01			30406		V485 CYG	71	2			2-2
2494	19 59 24	40 47.1	14	1.3	.70		-3.40			A	77	6			2-2
2495	19 59 58	33 24.6	10	1.6	1.63		-5.50	30407		N 6857	70	2			2-2
2496	20 0 49	76 21.7	35	1.6	1.44		-2.37	80038	7686	DO 38051	109	23			3-5
2497	20 0 55	64 40.7	16	1.1	.77			60278	7676	64 DRA	98	17			4-4
2498	20 1 0	30 11.5	13	1.9			-1.05			V718 CYG	68	-0			2-2
2499	20 1 31	21 22.1	12	2.1	1.58			20450			60	-5			2-2
2500	20 1 41	30 19.5	13	1.8	1.02		-1.83	30409		V719 CYG	68	-0			2-2
2501	20 2 20	67 44.1	22	1.1	1.47		-3.63	70161	7685	RHO DRA	101	19			3-4
2502	20 2 25	40 17.8	14	1.3	1.15			40379		GN CYG	76	5			2-2
2503	20 2 33	36 40.7	11	1.6	.33			40380		AA CYG	73	3			2-2
2504	20 2 56	20 31.5	12	2.0	.99			20452		X SGE	60	-6			2-2
2505	20 3 12	15 21.6	11	2.1	1.12			20454	7680		55	-9			2-2
2506	20 3 38	51 41.5	14	1.6	1.54			50315	7687	DO 38060	86	11			3-4
2507	20 3 45	25 26.5	12	1.9	1.06			30412		DO 18551	64	-3			2-2
2508	20 3 46	-27 22.4	11	3.3	-1.61			-30425		V19435GR	15	-28			1-1
2509	20 4 12	66 19.2	26	1.5			-2.74				99	18			2-4
2510	20 5 18	64 25.9	26	1.9			-4.44				98	17			2-4
2511	20 5 21	5 56.5	15	3.4	1.15			10451			47	-14			1-1
2512	20 6 9	56 51.0	14	1.8	1.52			60280		V555 CYG	91	13			3-4
2513	20 7 11	31 17.4	10	1.5	.32		-3.30			V490 CYG	69	-1			2-2
2514	20 7 47	-6 25.4	10	2.7	-1.82		-5.41	-10529			36	-20			2-2
2515	20 7 50	-1 45.6	10	2.4	.34			467		V504 AOL	41	-18			2-2
2516	20 7 56	47 44.9	13	1.7	1.24			50316		SV CYG	83	8			3-4
2517	20 8 3	26 8.3	7	1.5	1.22			30415		W VUL	65	-4			2-2
2518	20 8 50	-7 48.0	10	2.5			-3.37				35	-21			2-2
2519	20 9 17	35 59.3	19	2.7	1.07		-3.16	40393		Y429 CYG	74	1			1-2
2520	20 9 31	-11 22.7	10	2.5	.73			-10530			32	-23			2-2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	B	I	N
2521	20 9 41	9 46.8	10	2.3	1.01									
2522	20 10 18	-0 24.9	13	4.1	1.55			468		DO 6553		51	-13	1-1
2523	20 10 36	-1 12.0	10	2.5	1.34			469	7720	66 AOL		42	-18	1-2
2524	20 10 40	19 15.9	17	3.0		-2.08						42	-19	2-2
2525	20 10 56	32 5.8	13	1.7		-1.70		30420		V557 CVG		60	-8	1-2
												70	-1	2-2
2526	20 11 17	49 18.2	8	1.1	.07	-1.17	-2.87	50318		AC CVG		25	8	4-4
2527	20 11 21	18 48.3	9	2.0		-1.07						29	-8	1-2
2528	20 11 45	38 34.8	14	1.7	.61			40397		RS CVG		76	2	2-2
2529	20 11 45	17 34.1	16	3.0	1.16	-3.02						58	-9	1-2
2530	20 12 1	16 44.9	9	2.2		-1.67	-2.86					58	-10	1-2
2531	20 12 8	46 35.9	13	1.7	.23	-1.57		50320	7735	V695 CVG		83	7	3-3
2532	20 12 19	-4 44.2	9	2.1	1.33			472				39	-21	1-2
2533	20 12 22	39 14.0	20	2.5	1.41			40400		1.3:1		77	3	1-2
2534	20 12 26	26 16.8	17	3.0	.75							65	-5	1-2
2535	20 12 37	66 5.6	15	1.1	.35	-1.95		70163		DO 38210		100	17	4-4
2536	20 12 49	19 51.0	16	2.9		-4.30						60	-8	1-2
2537	20 13 18	7 31.0	16	3.1	.55	-1.91		10461		DO 6597	EO	50	-15	1-1
2538	20 13 27	30 54.8	13	1.7	1.33			30423		SX CVG		70	-2	2-2
2539	20 13 40	36 53.0	13	1.8	1.70					V432 CVG		75	1	2-2
2540	20 13 52	47 32.8	13	2.0	-1.02			50322	7751	OM12 CVG		24	7	2-4
2541	20 13 55	23 18.6	9	2.0	1.16			20461	7741	22 VUL		64	-6	1-2
2542	20 14 10	-21 23.6	12	3.6	.11	-1.01		-20585		RT CAP		22	-28	1-1
2543	20 14 11	80 9	74	3.8	1.64			80039		BD CEP		113	23	2-5
2544	20 14 53	40 14.3	20	2.5	.96			40401	7759	SVS 1015/5	R	78	3	1-2
2545	20 15 37	30 38.0	13	1.8	1.74	-1.45				SHARP. 104	R	75	1	2-2
2546	20 15 46	-15 3.7	11	3.9	1.39							29	-26	1-2
2547	20 16 0	33 55.9	11	1.6	.71			30425		DO 18825		73	-1	2-2
2548	20 16 8	43 9.2	14	1.6	1.78					BRIGHT NEB		20	4	2-3
2549	20 16 11	39 12.5	14	1.6		-1.34	-2.81			M4C 632		77	2	2-2
2550	20 16 40	34 13.6	10	1.6	.40	-1.67		30426		AU CVG		73	-1	2-2
2551	20 16 58	66 52.2	22	1.5	1.36	-1.51		30165		DO 38292		101	17	2-4
2552	20 17 7	-7 42.8	13	3.8	1.15							36	-23	1-2
2553	20 17 34	57 30.5	22	2.0	1.80	-1.59						92	12	2-4
2554	20 17 37	40 48.1	14	1.4	1.68	-1.27	-4.19			DO 38266	EO	78	3	2-2
2555	20 18 8	-14 59.1	10	2.7	.82			-10537	7776	BET CAP		29	-26	2-2
2556	20 18 13	47 44.9	9	1.5	.47	-1.01		50324		U CVG		24	7	3-3
2557	20 18 57	41 12.3	14	1.5	-1.34					BRIGHT NEB		79	3	2-3
2558	20 19 25	35 27.8	11	1.7	1.18	-1.25		40406		DO 18895		74	-1	2-2
2559	20 19 32	36 46.5	7	1.5	.11	-2.32	-3.43	40408		BI CVG		75	0	2-2
2560	20 19 43	37 22.5	11	1.6	-1.28	-3.12	-5.10	40409		BC CVG		76	0	2-2

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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	I	B	I	N
	H M S	O	S												
2561	20 19 14	40 17.1	11	1.3	.47			40410		V405 CYG			0		
2562	20 19 48	68 42.4	19	1.6	.05	-.77		70166	7804	AC DRA		78	2		3-3
2563	20 19 53	16 41.1	16	3.2	.77			20464		DO 18920		102	18		4-4
2564	20 20 24	39 47.2	14	1.6		-.94	-3.69					59	-11		1-1
2565	20 20 37	40 5.0	10	1.3	.40	-1.77	-3.74	40411	7796	GAM CYG	R	78	2		2-3
2566	20 20 46	63 48.6	23	1.7	1.44			60286	7803			78	2		3-3
2567	20 20 50	-0 37.8	10	2.6	1.70	-.78		473		DO 6708		98	15		2-4
2568	20 21 15	0 45.6	14	3.5	1.15			474		V865 AQL		43	-21		2-2
2569	20 21 28	51 51.7	14	1.9	1.61		-3.77	50326		V365 CYG		45	-20		1-1
2570	20 21 30	62 42.9	17	1.3	1.23			60288				88	8		3-4
2571	20 21 48	32 2.2	10	1.9	1.12	-1.17		30430	7806	39 CYG		97	14		4-4
2572	20 22 24	24 7.3	17	2.7			-3.41					72	-3		1-2
2573	20 23 25	33 45.8	10	1.9	1.54		-1.90					65	-8		1-2
2574	20 24 2	-2 12.7	13	3.7	1.34							73	-2		1-2
2575	20 24 9	38 11.3	10	1.3	-.41	-2.62	-3.86	40415		KY CYG		42	-22		1-2
2576	20 24 22	-21 43.9	16	3.4		-3.30	-2.62				EO	77	0		3-3
2577	20 25 6	-5 49.0	7	1.6	1.12			-10539				23	-30		1-2
2578	20 25 18	39 15.6	14	1.8		-1.64	-3.61					39	-24		2-2
2579	20 25 18	39 52.9	11	1.4		-1.18	-2.65				R	78	1		2-3
2580	20 25 19	36 22.7	11	1.6	1.14			40418		V441 CYG		79	1		3-3
2581	20 25 19	75 5.7	33	2.1	-.07	-1.33						76	-1		3-3
2582	20 25 21	55 35.7	20	1.9	1.35			80040		UU DRA		108	21		4-5
2583	20 25 29	40 54.4	10	1.2	1.15	-.63		60291		V372 CYG		91	10		2-4
2584	20 25 32	37 13.1	10	1.5	1.60	-2.54	-5.41	40420		KZ CYG		79	2		3-3
2585	20 26 29	37 37.9	10	1.4	1.23					SHARP. 106	EO	76	-1		3-3
2586	20 26 29	40 42.3	12	1.3		-1.88	-3.47	40422		DO 19043		77	-1		3-3
2587	20 26 43	63 4.3	25	2.0		-1.95					R	79	1		3-3
2588	20 26 51	16 6.7	16	3.2	.17	-.93				DO 38473		98	14		2-4
2589	20 26 52	9 42.8	16	3.4	.65			20470		RS DEL		59	-13		1-1
2590	20 27 14	39 48.4	10	1.3	-.04	-2.41	-3.59	10470		CT DEL		54	-17		1-1
2591	20 27 21	40 1.6	10	1.3	.52	-2.65	-4.49	40424		RW CYG		79	1		3-3
2592	20 27 41	-4 54.9	8	2.1	.73	-.63					EO A	79	1		3-3
2593	20 27 41	38 51.5	11	1.5		-1.36	-4.06	477		TZ AQL		40	-24		2-2
2594	20 28 55	35 .1	13	1.7		-2.55				W 69	R	78	0		2-3
2595	20 29 6	-23 10.7	16	3.3			-3.27			BRIGHT NEB		75	-2		2-3
2596	20 29 37	39 42.0	11	1.4	1.53							21	-32		1-2
2597	20 29 40	32 22.1	13	1.8	.90			40428		DO 19093		79	0		3-3
2598	20 29 48	49 3.2	8	1.4	1.18			30437		AD CYG		73	-4		2-2
2599	20 29 49	62 45.7	19	1.1	1.78		-2.47	50331	7851	OME2 CYG		96	6		2-3
2600	20 29 53	40 29.3	14	1.5	1.43		-2.88	60292		BF CEP		98	14		3-4
								40427		3.69		80	1		2-3



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CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	RC	BS	COMMENTS	L	I	B	J	M
2601	20 30 18	35 16.2	11	1.7	1.17	.77	-2.41	40429		V397 CYG MWC 349	75	-3			3.3
2602	20 30 48	40 6.3	10	1.2		-2.27	-4.48				79	0			3.3
2603	20 30 53	40 30.0	8	1.1	1.45	-1.83	-4.52			SVS 5206 W 72	80	0			3.3
2604	20 31 10	42 22.8	14	1.5	1.35	-1.32				3.70	81	2			3.3
2605	20 31 17	40 35.4	10	1.2	.30	-1.78		40431			80	0			3.3
2606	20 31 38	54 17.0	19	1.8	1.16			50333		DO 38576	91	9			2.4
2607	20 31 49	55 30.7	8	1.3	1.03	.56		40432		BRIGHT NEB	78	-1			3.3
2608	20 31 51	35 4.6	11	1.4	.47			40433	7366	47 CYG	75	-3			3.3
2609	20 32 16	42 15.6	12	1.3	.27	-1.93	-2.57	40434		DO 38592	81	1			3.3
2610	20 32 18	35 35.8	9	2.0	1.00			-10541			38	-26			2.2
2611	20 32 28	52 51.3	17	1.7			-3.62			V1199 CYG	90	8			2.4
2612	20 33 33	41 4.3	11	1.6		-1.04	-3.40				R	80	0		2.3
2613	20 34 9	53 39.0	13	1.6	1.15	.60					91	8			3.4
2614	20 34 13	42 42.2	10	2.5	.71		-2.78	483	7873	70 AQL	43	-24			2.2
2615	20 34 45	40 30.7	14	1.5							EO	R	80	-0	2.3
2616	20 35 0	41 24.9	14	1.5		-1.39	-3.68				81	0			2.3
2617	20 35 3	37 42.1	10	1.4	1.12	-1.23		40435			78	-2			3.3
2618	20 35 42	18 5.4	17	3.0	-1.46	-1.54	-3.76	26474	7886	EU DEL	62	-14			1.1
2619	20 36 3	6 48.5	14	4.0		-1.43				N 6944	52	-20			1.2
2620	20 36 31	41 55.8	12	1.3	1.87	-1.21				DO 38665	81	1			3.3
2621	20 36 34	42 27.9	11	1.4		-1.17	-4.25			DO 38758	82	1			2.3
2622	20 36 56	79 2.6	47	1.6	1.74	.77	-3.65	-20592	7900	UPS CAP	112	22			3.5
2623	20 37 8	18 17.5	10	2.5	.56		-4.43				28	-32			2.2
2624	20 37 17	42 9.8	15	1.6		-1.19	-4.40				EO	R	82	1	2.3
2625	20 37 26	41 9.2	12	1.3		-1.55					81	-0			3.3
2626	20 37 47	39 1.3	14	1.7	1.04			40439			79	-1			2.3
2627	20 37 49	53 20.8	14	1.6	1.36			50336		V1202 CYG	91	7			3.4
2628	20 37 56	50 3	17	1.3		-1.50					88	5			2.3
2629	20 38 20	1 1.8	7	1.7	1.45	.65		487		SVS 103015	47	-24			2.2
2630	20 39 23	8 7.5	11	2.6		.96		10476		DO 6927	54	-20			2.2
2631	20 39 26	41 40.4	12	1.3		-1.34	-3.13				82	-0			3.3
2632	20 39 32	47 57.7	12	1.3	-1.80	-3.66	-2.95	50338		V CYG	87	4			3.3
2633	20 39 34	45 6.3	11	1.5	.56	.66		50337	7929	ALF CYG	84	2			2.3
2634	20 39 43	62 17.4	21	1.7		.61					98	12			2.4
2635	20 40 39	38 31.8	11	1.6	2.29	.90		40441		V446 CYG	79	-2			2.3
2636	20 40 42	42 46.7	14	1.6			-3.63				R	83	0		2.3
2637	20 41 36	43 5	12	1.4	.43			40442		DG CYG	83	0			3.3
2638	20 41 51	24 26.3	16	3.5		-2.36	-2.89				EO	21	-35		1.1
2639	20 41 58	19 4.4	17	3.0	.80			26479		DO 19313	64	-14			1.1
2640	20 42 47	80 19.7	60	2.8	1.58			80041		DO 38643	114	22			3.6

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	H M S	O	S												
2641	20 43 2	17 54.2	10	2.4	- .83	-1.65	-3.56	20481	7941	U DEL	63	-15			1-1
2642	20 43 20	42 9.1	15	1.7	1.53			40446			82	-0			2-3
2643	20 43 21	30 29.7	18	2.7	1.05			30450	7942	52 CVG		-8	R		1-2
2644	20 43 22	56 18.6	13	1.5	.65	-1.13	-2.09	60297	7944		94	8			4-4
2645	20 43 49	-4 17.1	10	2.6	.78			489		W AOR	73	-27			2-2
2646	20 43 56	-1 4.6	11	2.6	-.08	-2.02		490			46	-26			2-2
2647	20 44 3	44 3.9	11	1.7		-1.47	-3.36			DO 38802	84	-1			2-3
2648	20 44 16	33 47.4	10	1.9	-.20			30451	7949	EPS CVG	76	-6			1-2
2649	20 44 19	61 38.9	14	1.3	1.08			60298	7957	ETA CEP	98	12			4-4
2650	20 44 37	39 56.0	11	1.4	-2.28	-5.58	-6.75	40448		NML CVG EO	81	-2			3-3
2651	20 44 47	-3 57.9	14	3.8	1.99						43	-27			1-2
2652	20 45 6	-5 12.1	10	2.5	-.39	-1.19		-10548	7951	3 AOR	42	-28			2-2
2653	20 45 15	45 22.5	14	1.9	1.33	-2.50		50341	7966	DO 38841	85	-1			2-3
2654	20 45 32	19 8.9	10	2.4	1.26			20484		V DEL	64	-15			1-1
2655	20 45 44	58 14.5	14	1.3	.84		-2.63	60299		DO 38657	95	9			4-4
2656	20 45 54	44 13.4	15	1.9	1.53		-3.97			I 5067	94	1			2-3
2657	20 46 16	28 3.9	12	2.2	1.16	-.61		30454		DO 19438	72	-10			2-2
2658	20 46 49	-0 43.5	11	2.5	-.07	-1.45		494		DO 7006	47	-26			2-2
2659	20 46 49	22 49.1	17	2.9	-.40			20486		F1 VUL	68	-13			1-2
2660	20 47 6	31 40.1	13	1.8	.88	-.77		30455		AM CVG	75	-8			2-2
2661	20 47 24	-3 12.3	14	3.7	1.56						45	-28			1-2
2662	20 47 49	5 53.7	9	2.2	1.04	-.49		10479		DO 7021	53	-23			2-2
2663	20 48 1	49 56.5	13	1.5	.70			50345			89	4			2-5
2664	20 48 12	-22 53.5	16	3.5	.84	-1.64				EO	23	-36			1-2
2665	20 48 35	-27 5.5	16	3.4	.23			-30437	7980		18	-37			1-1
2666	20 48 40	-11 15.8	10	2.5	1.10			-10550		BX AOR	36	-32			2-2
2667	20 50 2	47 9.6	7	1.2	.31	-1.06		50347		RZ CVG	87	2			3-3
2668	20 50 17	80 22.5	67	3.3	1.24			80042	8016	SVS 102045	114	22			3-5
2669	20 50 21	38 34.9	20	2.5	.61						89	-4			1-2
2670	20 50 28	-12 34.7	13	3.5	.18					M 72	35	-33			1-2
2671	20 50 41	72 23.6	37	2.7	2.22		-2.62				107	18			2-5
2672	20 50 43	23 10.0	17	2.9	.28	-.84		20490		RX VUL	68	-13			1-2
2673	20 51 0	29 29.6	18	2.9	1.79	-1.10			7999	DO 19589	73	-10			1-2
2674	20 51 10	22 55.3	19	2.5	.71					DO 19599	76	-7			1-2
2675	20 51 12	25 22.9	12	2.0	.93			30460		IN VUL	70	-12			2-2
2676	20 52 22	27 52.2	12	2.2	1.27			30462	8008		72	-11			2-2
2677	20 52 58	30 13.4	13	1.9	.56	-1.76		30464		UX CVG	74	-9			2-2
2678	20 54 50	16 3.4	9	2.0	.62			20493		SVS 102047	63	-19			2-2
2679	20 54 55	37 13.0	19	2.4	.88	-.61				A	50	-5			1-2
2680	20 54 59	68 .8	28	1.8			-2.89			FR CEP	104	15			2-5

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	H	M	S												
		O													
2681	20 56 12	56 13.5	20	2.2	1.54										
2682	20 56 18	44 35.4	14	1.8	.81			40458		DO 39057					2.4
2683	20 56 25	46 16.5	11	1.6	.95			50351		AZ CYG					2.3
2684	20 56 34	85 29.1	212	6.0		-1.44	-3.44			EO					3.3
2685	20 56 59	41 7.4	20	2.1	1.27	-.94	-3.87			DO 39067					3.6
2686	20 57 5	27 14.4	9	1.8	.35	-2.25									1.2
2687	20 59 58	61 41.7	22	2.4	1.73	-.80									1.2
2688	21 0 11	36 29.6	7	1.5		-2.72	-6.00			AR					2.4
2689	21 0 34	44 35.6	11	1.5	.56			40464	8062	DO 39142					2.2
2690	21 0 49	82 52.7	110	3.6	1.43	-1.16	-3.36			X CEP					2.2
2691	21 0 51	35 39.4	18	2.6	.68										3.6
2692	21 0 54	-2 32.9	16	3.6	1.48					DO 19908					1.2
2693	21 0 57	59 30.2	17	1.6	1.49	-.96		60303							1.2
2694	21 1 19	23 48.3	17	2.6	-.49		-2.83	20501		DY VUL					3.4
2695	21 1 20	67 58.7	16	1.2		-1.36	-2.58			DO 19939					1.2
2696	21 2 12	25 34.9	16	3.1	1.16										4.5
2697	21 2 17	37 39.4	13	1.6	1.44		-2.44	40465							1.2
2698	21 2 36	37 4.7	13	1.7	.43	-1.31		40466		GR CYG					2.2
2699	21 2 49	53 8.9	14	1.4	.89	-1.18									2.2
2700	21 2 53	27 11.5	13	1.7	1.27			30469		SVS 5337					3.3
2701	21 3 11	-18 19.7	15	3.6	1.72		-3.04								2.2
2702	21 3 18	-0 25.7	10	2.7	-.53	-2.40	-3.12	499		RV AOR					1.2
2703	21 3 24	43 43.6	21	2.5	-.36			40468	8079	X1 CYG					2.2
2704	21 3 28	51 36.5	11	1.4	1.25	-1.54	-3.26	50357							1.2
2705	21 3 41	7 38.7	11	2.6	1.52			10486		Y EQU					3.3
2706	21 4 13	56 30.5	19	2.4	2.02	-1.33	-3.18								2.2
2707	21 4 18	-25 11.1	16	3.8	.34			-30441	8080	24 CAP					2.4
2708	21 4 28	-16 37.4	10	2.7	-.64	-1.97	-2.92	-20596		RS CAP					1.1
2709	21 4 36	47 27.4	14	1.7	.89			50359	8089	63 CYG					2.2
2710	21 4 42	25 44.5	16	3.1	1.06										1.2
2711	21 4 50	16 13.0	16	3.2	1.02										1.2
2712	21 4 56	-0 21.1	8	2.3	.59			500		DO 7180					2.2
2713	21 5 7	42 1.9	8	1.5		-2.12	-4.34			N 7027					2.2
2714	21 5 25	29 10.2	18	2.8			-3.24			CT CYG					1.2
2715	21 5 41	32 2.2	9	2.3		-1.01									1.2
2716	21 5 52	6 48.3	11	2.7	1.14			10487	8090	DO 7197					2.2
2717	21 6 3	2 58.1	15	3.7	.99			501		DO 7199					1.2
2718	21 7 33	37 42.8	18	2.1	1.07		-2.62								1.2
2719	21 8 39	47 27.6	12	1.7	.83	-.64		50363		DO 39269					2.2
2720	21 8 52	52 38.4	15	1.5	.87	-.77	-2.79	50362							3.3

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	H	M	S	O	S						O		
2721	21 9 6	68 17.5	14	1.3	-1 92	-3 33	-3 71	70168	8113	1 CEP	105	14	5 5
2722	21 9 57	-14 35.6	8	2.2	.17	-1 38		-10558		RX AOR	35	-38	2 2
2723	21 10 35	30 5	13	1.8	.68			30472	8115	214 CYG	77	-12	3 3
2724	21 11 11	70 51.4	29	1.8		-1 18				DO J9337	107	15	3 5
2725	21 11 29	59 53.3	15	1.3	-1 14	-1 74		60305		SVS 102073	99	8	3 4
2726	21 13 0	-1 19.2	15	3.7		-1 12					50	-32	1 2
2727	21 13 2	-15 20.9	10	2.7	.16			-20598	8128	29 CAP	35	-39	2 2
2728	21 13 36	-9 26.2	16	3.7	1.13			-10559			42	-36	1 2
2729	21 13 40	38 55.0	14	1.6		-1 84				V1236 CYG	24	-7	2 2
2730	21 13 54	28 30.7	17	2.9		-1 57					76	-14	1 2
2731	21 14 8	53 49.3	17	1.8	.95			50367		V702 CYG	95	4	2 2
2732	21 14 41	8 27.3	16	3.6		-1 12					60	-27	1 2
2733	21 14 46	41 45.6	12	2.5			-3.30			DO 39366	86	-5	1 2
2734	21 15 9	11 13.7	17	3.5	1.04					RY EQU	62	-25	1 2
2735	21 15 14	40 49.4	15	1.7	1.84	-1 44		40477			85	-6	2 2
2736	21 15 40	-17 30.3	15	3.7			-3.63				33	-40	1 2
2737	21 15 55	7 32.7	9	1.9	1.02			10491		RU EQU	59	-28	3 3
2738	21 16 6	-1 27.8	15	3.7	1.25						51	-33	1 2
2739	21 16 26	10 58.6	12	2.6	1.69			10492	8149	DO 7315	62	-26	2 3
2740	21 16 34	75 46.1	38	2.2	1.33		-2.28	80044	8168	DO 39444	112	19	4 6
2741	21 16 37	19 52.7	17	3.3	1.04						70	-20	1 2
2742	21 16 58	16 59.6	16	3.2	1.31	-1 73					67	-22	1 2
2743	21 17 1	55 3.9	15	1.6	.92	-1 84		60309		DO 39414	96	4	2 2
2744	21 17 3	8 21.4	16	3.6	1.16						60	-28	1 2
2745	21 17 27	63 22.0	17	1.3	1.58			60312		DO 39430	102	10	4 5
2746	21 17 29	60 58.3	15	1.4	.93			60311			100	8	3 4
2747	21 17 37	50 35.1	18	2.0	1.44			50372			93	1	2 2
2748	21 17 44	58 24.7	14	1.4	.50			60313	8164	DO 39440	98	6	4 4
2749	21 18 10	13 4.0	16	3.0		-2 25					64	-25	1 2
2750	21 18 20	55 14.6	17	2.1	.32			60315		FZ CEP	96	4	2 2
2751	21 18 41	7 8.2	8	1.8	1.19			10494	8163	9 EQU	59	-29	3 3
2752	21 18 42	49 7.8	16	1.8	.78			50374		DO 39446	92	-0	2 2
2753	21 20 2	-22 56.7	15	3.7	1.23			-20600	8172		26	-43	1 1
2754	21 20 7	21 47.4	12	2.1	1.18			20506		SW PEG	72	-20	2 2
2755	21 20 33	42 9.6	10	1.6	1.04			40478		YY CYG	87	-5	1 1
2756	21 20 46	23 14.9	17	2.3	1.42	-1 72		20507		BM PEG	73	-19	1 2
2757	21 20 55	77 36.5	31	1.5	1.01	-1 88	-2 42	80045		CH CEP	113	19	6 6
2758	21 20 57	-13 5.8	14	3.5		-1 94				SVS 102086	39	-40	1 2
2759	21 20 58	40 42.8	20	1.9	.71			40479		DO 20354	26	-7	1 1
2760	21 22 38	24 20.7	12	1.9		-1 02	-3 30				74	-18	2 2

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	H	M	S											
2761	21 22 46	79 34.0	74	3.6	1.33			80047		DO 39574	114	21		2.5
2762	21 23 39	16 5.4	17	3.5	1.29						58	24		1.2
2763	21 23 40	31 18.1	16	3.7		-3.40		-20602	8204	2ET CAP	15	45		1.1
2764	21 23 52	22 37.1	15	3.7	1.12			60317		SW CEP	27	44		1.1
2765	21 24 13	62 22.1	16	1.7	1.10	-1.35					102	9		4.5
2766	21 24 19	69 46.7	29	2.2		-1.05	-2.26			DO 39607	107	14		2.5
2767	21 26 1	59 31.9	17	1.6	.63			60318	8224	AX CEP	100	6		2.3
2768	21 26 40	70 1.1	20	1.9	.58	-1.53		70170			107	14		4.5
2769	21 26 43	21 57.7	11	1.9	-1.43			20511	8223	SVS 102104	73	21		2.2
2770	21 26 55	51 2.5	21	2.2		-3.13					54	0		1.2
2771	21 26 58	71 35.7	18	1.1	.94	-1.33	-2.88	70171			108	15		5.5
2772	21 27 43	23 24.3	17	2.5	.36			20512	8225	2 PEC	74	20		1.1
2773	21 27 55	69 46.6	31	2.6		-1.73					107	14		2.5
2774	21 28 20	12 44.2	11	2.4	1.59			10497		FT PEC	56	27		2.2
2775	21 28 38	10 55.0	8	1.8	.06	-2.33	-3.39	10498		UU PEC	64	26		3.3
2776	21 28 50	5 48.7	10	2.7	.71			-10565	8232	BET AOR	48	38		2.2
2777	21 29 39	60 39.6	19	1.1	1.35						101	7		2.4
2778	21 30 14	74 30.4	39	2.1		-3.49					111	17		2.5
2779	21 31 16	54 3.9	17	1.8	.25	-.97		50383		1.353	97	2		2.2
2780	21 31 58	52 17.7	16	2.7	1.73	-3.72					55	1		1.2
2781	21 32 3	38 49.8	19	2.3	-.07	-2.08		40485		SVS 5438	26	19		1.1
2782	21 32 14	1 37.2	10	2.2	.02	-.65		504		DO 7486	26	35		2.3
2783	21 32 21	13 39.9	17	3.6	.96						67	27		1.2
2784	21 34 16	31 52.3	18	2.2	1.05			30476		4B CYG	82	15		1.1
2785	21 36 22	16 43.6	29	1.4	-1.57	-2.90	-3.19	80048		5 CEP	114	19		6.6
2786	21 37 26	69 6.3	31	2.8		-3.55					107	13		2.5
2787	21 37 40	-1 53.2	9	1.9	.46	-2.04		507		DO 7540	54	38		3.3
2788	21 38 12	43 3.2	10	1.8	.73			40488	8284	75 CYG	90	7		1.1
2789	21 38 24	50 1.2	23	1.7		-1.15				V645 CYG	95	2		1.1
2790	21 38 57	54 6.1	14	1.5	-.74	-2.06	-3.25	50390		RU CYG	97	1		2.2
2791	21 39 9	51 30.3	13	2.0	1.35			50389		SVS 5461	96	1		1.1
2792	21 39 46	5 26.7	8	1.9	.74			10502	8289	7 PEC	61	34		3.3
2793	21 39 48	35 16.0	18	2.8	-.28			40489	8297	V460 CYG	85	13		1.1
2794	21 39 53	45 32.2	20	2.7	-.08			50392	8298	SVS 102121	92	5		1.1
2795	21 40 12	54 37.2	14	1.5	1.06	-1.02		50393		DO 39976	98	1		2.2
2796	21 40 49	40 55.4	20	1.8	1.10			40490	8306	DO 39985	89	9		1.1
2797	21 40 51	61 31.4	18	1.6	1.65	-3.53		60324			102	7		3.4
2798	21 41 20	37 47.2	19	2.3	-.24	-1.32		40491		RV CYG	87	11		1.1
2799	21 41 43	76 9.2	30	1.6	-.77	-1.35	-2.63	80049		AX CEP	112	18		6.6
2800	21 41 45	9 39.3	9	2.1	-1.07	-1.50		10503	8308	EPS PEC	66	31		3.3

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	H M S	O .	S .										
2801	21 42 8	17 4.6	12 2.3		1.44								
2802	21 42 12	58 32.7	15 1.5		-2.32	-4.17	-4.65			9 PEG	72	-27	2-2
2803	21 42 17	-9 19.1	11 2.3		1.46					MUJ CEP	101	4	3-3
2804	21 42 50	12 27.8	10 2.0		.47	-2.35				46 CAP	46	-42	2-3
2805	21 43 47	73 24.3	21 1.2		-.50	-1.76				TU PEG	68	-30	3-3
										SVS 5471	111	15	6-6
2806	21 44 3	-2 25.9	8 1.9		-1.91	-3.07	-3.84			SVS 5460	54	-39	3-3
2807	21 44 56	57 50.7	18 1.7		1.51					DO 40105	100	4	3-3
2808	21 45 41	64 21.9	16 1.2		.45	-1.97	-3.43			RT CEP	105	8	4-4
2809	21 46 16	60 27.5	16 1.5		1.70	-1.73	-3.05			12 CEP	102	5	4-4
2810	21 47 19	61 1.9	20 1.9		1.50						103	6	2-4
2811	21 47 30	52 11.6	11 1.6		1.00					1.339	97	-1	1-1
2812	21 50 2	21 1.7	12 2.2		.48	-1.08				DO 20956	77	-25	2-2
2813	21 50 47	55 44.3	15 1.3		1.43	-.38				SVS 8705	100	1	2-2
2814	21 52 36	79 19.1	69 3.6		1.82		-2.45				115	20	2-6
2815	21 52 58	51 14.4	14 1.8		1.46	-.82	-3.75			BQ CYG	97	-2	2-2
2816	21 53 3	54 14.6	26 2.3		1.19					V413 CYG	99	0	1-2
2817	21 53 14	50 14.1	11 1.8		1.04					LW CYG	97	-3	1-2
2818	21 53 59	22 37.7	9 2.0		1.09	-.99				RX PEG	78	-25	1-1
2819	21 54 27	-14 20.6	10 2.7		.49	-1.46					42	-47	2-3
2820	21 54 58	17 32.0	11 2.2		1.35					DO 21036	75	-28	2-2
2821	21 55 16	53 23.4	16 1.5		-.53	-1.14	-4.36			VV CEP	105	7	4-4
2822	21 55 27	80 4.1	39 1.8		.78	-1.04				DO 40561	116	20	6-6
2823	21 55 44	-21 30.0	14 3.9		.69						32	-20	1-1
2824	21 55 51	23 26.1	17 2.5		.94						79	-24	1-1
2825	21 56 10	56 29.7	19 2.0		.83	-1.84				SVS 5494	101	2	2-2
2826	21 56 48	54 19.5	13 1.2		1.62					DO 40493	100	-0	2-2
2827	21 57 27	62 27.0	23 2.0		.82					DO 40532	105	6	2-4
2828	21 57 30	23 42.0	13 2.1		-.51	-1.21				DO 21073	90	-24	2-2
2829	21 58 36	76 25.5	49 3.0		1.46		-2.58			DO 40578	113	17	3-6
2830	21 58 46	-35 50.7	10 2.1			-1.65	-3.42				9	-53	1-1
2831	21 59 8	33 28.7	18 2.2		-.39						87	-17	1-1
2832	21 59 56	48 29.3	13 1.3		.08	-1.40				GY CYG	96	-5	2-2
2833	21 59 56	56 42.5	28 3.1		1.20					YY CEP	101	1	1-2
2834	22 0 21	54 29.5	17 1.4		1.48					DO CYG	100	-0	2-2
2835	22 0 24	-0 8.3	10 2.5		1.39					DO 7686	60	-41	2-3
2836	22 0 28	-31 39.9	14 3.8		.36						16	-53	1-1
2837	22 1 44	28 7.1	10 2.0		-.78	-2.20	-4.98			TW PEG	84	-22	2-2
2838	22 2 6	16 23.3	16 3.1								75	-30	1-2
2839	22 2 23	62 53.7	17 1.5		-.11					18 CEP	105	6	4-4
2840	22 2 57	50 51.4	24 1.9			-2.46					98	-4	1-2

CRL	RA(1950)	DEC(1950)	EA	ED	M(3)	M(11)	M(20)	JRC	BS	COMMENTS	L I B I I M
1	10 10 10	10 10 10	10	10	10	10	10	10	10		
2	10 10 10	10 10 10	10	10	10	10	10	10	10		
3	10 10 10	10 10 10	10	10	10	10	10	10	10		
4	10 10 10	10 10 10	10	10	10	10	10	10	10		
5	10 10 10	10 10 10	10	10	10	10	10	10	10		
6	10 10 10	10 10 10	10	10	10	10	10	10	10		
7	10 10 10	10 10 10	10	10	10	10	10	10	10		
8	10 10 10	10 10 10	10	10	10	10	10	10	10		
9	10 10 10	10 10 10	10	10	10	10	10	10	10		
10	10 10 10	10 10 10	10	10	10	10	10	10	10		
11	10 10 10	10 10 10	10	10	10	10	10	10	10		
12	10 10 10	10 10 10	10	10	10	10	10	10	10		
13	10 10 10	10 10 10	10	10	10	10	10	10	10		
14	10 10 10	10 10 10	10	10	10	10	10	10	10		
15	10 10 10	10 10 10	10	10	10	10	10	10	10		
16	10 10 10	10 10 10	10	10	10	10	10	10	10		
17	10 10 10	10 10 10	10	10	10	10	10	10	10		
18	10 10 10	10 10 10	10	10	10	10	10	10	10		
19	10 10 10	10 10 10	10	10	10	10	10	10	10		
20	10 10 10	10 10 10	10	10	10	10	10	10	10		
21	10 10 10	10 10 10	10	10	10	10	10	10	10		
22	10 10 10	10 10 10	10	10	10	10	10	10	10		
23	10 10 10	10 10 10	10	10	10	10	10	10	10		
24	10 10 10	10 10 10	10	10	10	10	10	10	10		
25	10 10 10	10 10 10	10	10	10	10	10	10	10		
26	10 10 10	10 10 10	10	10	10	10	10	10	10		
27	10 10 10	10 10 10	10	10	10	10	10	10	10		
28	10 10 10	10 10 10	10	10	10	10	10	10	10		
29	10 10 10	10 10 10	10	10	10	10	10	10	10		
30	10 10 10	10 10 10	10	10	10	10	10	10	10		
31	10 10 10	10 10 10	10	10	10	10	10	10	10		
32	10 10 10	10 10 10	10	10	10	10	10	10	10		
33	10 10 10	10 10 10	10	10	10	10	10	10	10		
34	10 10 10	10 10 10	10	10	10	10	10	10	10		
35	10 10 10	10 10 10	10	10	10	10	10	10	10		
36	10 10 10	10 10 10	10	10	10	10	10	10	10		
37	10 10 10	10 10 10	10	10							

CRL	RA(1950)	DEC(1950)	H	M	S	O	EA	ED	M(4)	M(11)	M(20)	JRC	BS	COMMENTS	L	I	B	I	N
2841	22 3 0	59 53.5	22	2	0				1.32			50417	8421	DO 40695	104	4			2-3
2842	22 3 10	46 29.4	15	2	0				.76			512	8413	DO 40695	96				2-2
2843	22 3 12	4 43.0	8	1	8				.99			513	0414	DO 40695	65				3-3
2844	22 3 15	-0 35.3	11	2	7				.57			40501		ALF 408	60				2-3
2845	22 3 21	75 6.2	11	1	6				-1.04	-2.49				SV PEG	89				2-2
2846	22 3 34	10 18.8	16	3	5				1.80	-.65	*	60340		DO 40716	70				1-2
2847	22 3 59	62 49.5	21	1	9				1.23			60341		TT CEP	105				3-4
2848	22 4 0	62 14.8	22	1	9				1.47						105				2-4
2849	22 4 33	41 37.1	19	1	7				1.50						93				1-1
2850	22 4 42	-13 16.9	14	3	9						-3.81				45				1-2
2851	22 4 48	11 36.4	11	2	3				1.09	-1.31		10510	8433	SVS 102147	72				2-2
2852	22 5 27	-34 19.7	14	3	9				.77			-30497E		UPS PSA	11				1-1
2853	22 5 28	17 51.3	16	2	9				1.09						77				1-2
2854	22 6 22	12 18.0	11	2	3				1.51			10511		7	73				2-2
2855	22 6 23	74 30.3	22	1	4				1.39			70183		LO 4085h	113				5-5
2856	22 6 23	49 30.9	16	1	6				1.50			50421	8445	DO 40803	58				2-2
2857	22 6 33	59 18.1	16	1	5				1.49	-1.27		60343		42 CEP	104				3-3
2858	22 6 37	43 54.1	20	1	7					-1.92	-3.42				93				1-1
2859	22 7 6	72 31.4	23	1	6				.73			70184		DM CEP	111				4-5
2860	22 7 37	1 33.2	11	2	5					-2.06					63				2-3
2861	22 7 42	34 54.3	20	2	7				1.60	-2.10	-4.63				89				1-2
2862	22 9 13	11 23.7	11	2	3				1.27			10513	8458	DO 7747	72				2-2
2863	22 8 23	10 58.9	16	3	0				.97						72				1-2
2864	22 9 2	57 57.6	16	1	3				1.29	-.55		60344	8465	2E7 CEP	103				2-2
2865	22 9 33	56 47.1	14	1	5				.90	-1.72	-3.27	60345		CU CEP	102				2-2
2866	22 9 44	14 16.2	10	1	8				.66	-1.57		10514		RS PEG	75				2-2
2867	22 10 40	63 2.8	17	1	5				.77			60347	8483	DO 40954	106				4-4
2868	22 11 31	25 10.7	17	2	5				1.28			30488		GK PEG	94				1-1
2869	22 11 40	39 28.2	11	1	5				.77	-.65		40506	8485	SVS 102156	93				2-2
2870	22 12 12	-14 28.9	13	4	1						-3.65				44				1-2
2871	22 12 13	-39 45.8	15	3	6				*		-3.10				2				1-1
2872	22 12 22	57 45.1	20	1	5				.41		-3.32	60348	DO 40697		103				2-2
2873	22 12 25	75 43.6	65	4	2					-1.32	-3.33				114				2-5
2874	22 13 45	3 6.0	11	2	6				1.92		-3.18				66				2-3
2875	22 13 46	37 29.6	11	1	5				.74			40507	8458	1 LAC	92				2-2
2876	22 14 36	-0 40.5	11	2	6						-3.18				62				2-3
2877	22 14 55	72 9.7	32	2	7					-1.29					112				2-4
2878	22 14 57	66 45.7	17	1	3				1.91	-.65				BM CEP	109				4-4
2879	22 15 39	2 27.6	10	2	5				1.50		-2.10	516		UM PEG	66				2-3
2880	22 16 2	13 21.2	11	2	3				.99			10515		TX PEG	76				2-2

## TABLE OF OBSERVATIONS

CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	-BS	COMMENTS	L I I	B I I	N
2881	22 16 37	43 31.0	12	1.6	1.39	-1.13							
2882	22 16 54	51 11.4	21	2.1	.39								
2883	22 17 24	35 .3	20	2.7	1.36	-1.42				C2 LAC			
2884	22 17 29	63 3.3	11	1.1	1.24	-2.13				SHARP. 140			
2885	22 17 42	59 35.4	15	1.2	.25	-2.26							
2886	22 17 50	-16 43.1	13	4.1									
2887	22 18 27	61 54.7	14	1.4	.96	-1.02							
2888	22 18 43	26 40.9	10	2.1	1.06								
2889	22 19 2	-7 51.8	8	1.9	.20	-1.07							
2890	22 19 5	-23 22.4	16	3.3	.80								
2891	22 19 24	45 23.6	14	1.9	1.11								
2892	22 19 56	48 53.1	20	1.6	1.08								
2893	22 20 38	-22 17.5	11	2.6	1.27								
2894	22 21 12	-16 17.4	13	3.8	.75								
2895	22 21 30	31 .6	10	1.6	.40								
2896	22 21 39	55 42.3	19	1.5	1.18	-1.31							
2897	22 21 44	35 45.0	10	1.6	1.81	-1.17							
2898	22 21 55	-14 31.1	10	2.3		-3.97							
2899	22 22 47	54 30.2	24	1.9	1.25	-1.67							
2900	22 23 14	30 13.0	17	2.2		-1.73							
2901	22 24 4	60 4.5	21	1.9	.89	-2.13							
2902	22 24 10	63 3.1	26	2.8	1.59								
2903	22 24 31	9 54.4	15	3.3	1.18								
2904	22 24 36	45 8.6	16	2.0	1.44								
2905	22 25 11	-39 59.5	14	3.9		-2.22							
2906	22 25 24	-38 39.2	14	3.6		-3.22							
2907	22 25 34	-14 17.3	10	2.8	1.33								
2908	22 26 5	35 16.2	11	1.9	1.37								
2909	22 26 6	65 50.1	31	2.7		-1.56							
2910	22 26 37	58 58.1	17	1.4	1.06	-.99							
2911	22 26 49	8 53.5	16	3.0	1.30								
2912	22 26 53	49 52.2	16	1.3	1.09								
2913	22 27 21	47 26.3	13	1.5	-.08								
2914	22 27 23	54 10.0	24	1.9	1.17	-.89							
2915	22 28 16	-18 16.1	16	3.5		-4.90							
2916	22 28 21	56 44.7	15	1.3	.96	-1.10							
2917	22 28 41	-31 56.1	13	3.8	.94	-1.58							
2918	22 30 20	32 57.7	15	1.3	1.02								
2919	22 30 37	55 10.5	14	1.3	.74	-1.20							
2920	22 31 36	66 40.7	29	2.6	1.23								



TABLE OF OBSERVATIONS

CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L II	B II	N
	H M S	D M S	S								O	O	
2921	22 31 39	24 16.7	13	2.0	.49	-.31		20532		SS PEG	97	-.29	2-2
2922	22 31 45	58 38.5	17	1.3	.70	-1.71	-4.04	60361		DO 41575	106	.1	3-3
2923	22 32 56	-25 12.4	16	3.8	.77						49	-.60	1-2
2924	22 34 10	-9 .7	16	3.3	.88						57	-.53	1-2
2925	22 34 25	58 10.2	17	1.5	1.25	-1.52		60362		W CEP	106	0	3-3
2926	22 34 53	65 35.4	30	2.7	1.22		-4.05				110	6	2-5
2927	22 36 27	72 48.6	34	2.4			-2.65				113	13	2-4
2928	22 36 28	56 32.0	15	1.3	-.46	-.42		60363	8621	SVS 102195	105	-.1	3-3
2929	22 36 50	75 6.0	28	1.8	1.60	-1.87		80055	8625	DO 41729	115	15	3-5
2930	22 37 44	-26 30.8	17	3.4			-4.70				27	-.61	1-2
2931	22 37 56	40 24.6	14	1.5	1.50			40515		DO 41747	98	-.16	2-2
2932	22 38 30	49 45.3	11	1.2	1.17			50440		GI LAC	102	-.8	3-3
2933	22 38 55	10 45.4	16	3.2	1.59		-2.82				79	-.41	1-2
2934	22 39 21	20 55.3	17	2.8	1.42	-.70		20534		BC PEG	97	-.32	1-2
2935	22 39 22	-5 23.4	10	2.8	.63			-10585			63	-.52	2-2
2936	22 39 38	42 16.2	12	1.2	1.57			40518		DO 41783	99	-.14	3-3
2937	22 40 12	53 38.3	17	1.7	1.55			50441	8648	AN LAC	105	-.4	2-2
2938	22 40 31	29 57.2	9	1.4	.67			30499	8650	ETA PEG	92	-.25	3-3
2939	22 40 31	13 18.5	16	3.1	.88						91	-.39	1-2
2940	22 40 33	27 54.8	12	2.1	.82			30498		BD PEG	91	-.27	2-3
2941	22 40 55	59 30.3	15	1.3	1.17	-1.40		60364		SVS 5604	107	.1	2-2
2942	22 40 56	-19 5.4	9	2.1	.86			-20620	8649	66 AOR	42	-.60	2-2
2943	22 40 58	22 55.8	12	2.0	1.33			20535		BE PEG	98	-.31	2-2
2944	22 41 3	40 3.3	18	1.7	1.87	-2.38					98	-.16	1-2
2945	22 41 49	6 12.4	15	3.4	.92						76	-.44	1-2
2946	22 41 55	29 19.8	10	1.6	1.58			30500		SVS 102202	92	-.26	3-3
2947	22 41 57	-19 26.5	13	4.1			-3.63				41	-.60	1-2
2948	22 42 20	61 26.9	21	1.3	1.28			60365		OG CEP	108	.2	2-2
2949	22 42 39	74 32.6	32	1.9	1.22	-.94					115	14	3-5
2950	22 42 50	46 55.0	14	1.8	1.64			50444		OO 41913	102	-.10	2-2
2951	22 42 50	6 37.0	15	3.5		-1.38					76	-.44	1-2
2952	22 42 53	5 58.5	15	3.4	.62		-5.03				76	-.45	1-2
2953	22 43 14	6 8.6	15	3.4	.97						76	-.45	1-2
2954	22 43 32	-1 52.6	11	2.2		-1.38					68	-.51	2-3
2955	22 45 21	6 24.5	15	3.4	.92	-1.27					77	-.45	1-2
2956	22 45 21	12 2.8	16	3.2		-1.14					92	-.40	1-2
2957	22 45 40	54 53.0	14	1.3	.70	-1.61	-2.39	50446		U LAC	106	-.4	3-3
2958	22 45 49	57 53.4	22	1.8		-.49	-3.37			N 7380	107	-.1	2-2
2959	22 46 11	18 19.2	17	2.7	1.18								1-2
2960	22 46 42	27 5.6	9	1.3	.65	-.98		30502		ST PEG	92	-.28	3-3

TABLE OF OBSERVATIONS

CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IRC	BS	COMMENTS	L	I	B	I	M
	H M S	O	S												
2961	22 46 48	-14 25.1	15	3.8	.94										
2962	22 46 57	-13 50.3	7	1.6	-.11	-.65		-10587	8679	TAU AQR SHARP. 146					
2963	22 47 23	59 40.5	17	1.3	1.67	-.74	-2.70	60368	8688						
2964	22 47 25	55 39.4	17	1.7	-.72	-1.37		40522		RX LAC					
2965	22 47 34	40 47.0	8	1.2											
2966	22 47 45	24 20.7	13	1.9	1.07	-2.10	-2.79	20537	8684	MU PEG					
2967	22 47 52	65 56.7	18	1.7	.87			70190	8694	IOY CEP					
2968	22 48 5	60 1.5	21	2.0	1.48	-1.60	-3.63	60370		DO 41 62					
2969	22 48 51	61 31.4	31	1.9	1.29			60372		SVS 5623					
2970	22 48 55	17 50.9	11	2.1	.95			20538		AF PEG					
2971	22 49 4	63 59.5	17	1.4	1.08	-.88		60371		VX CEP					
2972	22 49 7	7 1.0	15	3.5	1.19										
2973	22 49 16	47 48.7	23	1.8	1.97										
2974	22 49 29	-25 33.1	10	2.2	1.19	-1.42	-4.03	-30455		SVS 5621					
2975	22 49 34	-0 58.9	16	3.3			-4.92								
2976	22 49 43	43 2.1	12	1.3	.61			40523	8699	15 LAC					
2977	22 49 49	-7 53.0	10	2.7	-.40	-1.05		-10588	8698	LAM AOR					
2978	22 49 56	17 29.0	16	3.0	1.38					DO 21822					
2979	22 49 58	50 42.2	17	1.7	1.70			50449							
2980	22 50 25	50 27.3	19	1.6	1.85			50450		DO 42118					
2981	22 50 29	-28 3.5	16	4.1			-4.58								
2982	22 51 20	61 1.4	18	1.3	1.30	-1.18		60374		DO 42141					
2983	22 51 32	-19 25.5	10	2.3		-1.54	-3.80	-20623							
2984	22 51 47	8 37.9	11	2.3	.58	-1.85		10523		DO 7912					
2985	22 51 54	65 59.7	17	1.7	.70	-1.10									
2986	22 52 11	16 40.2	9	1.9	.59		-4.75	20539	8714	SVS 880					
2987	22 52 34	60 33.7	17	1.8	.74	-1.56		60375		FO LAC					
2988	22 52 37	84 49.0	118	3.4	.52	-.69				AR CEP					
2989	22 52 38	-29 50.9	10	2.2	-.95	-2.17	-3.36	-30456		V PSA					
2990	22 53 13	48 45.4	24	2.8	1.16	-3.51									
2991	22 54 13	58 15.8	14	1.4		.68									
2992	22 54 21	49 27.2	13	1.3	.59	-.24		50452	8726	SHARP. 149					
2993	22 54 23	-20 36.4	10	2.6	1.74	-1.41	-4.15	-20624		SVS 102221					
2994	22 54 43	54 25.9	26	1.9		-1.15				S AQR					
2995	22 54 54	-29 50.2	11	4.0	.71			-30458	8728	ALF PSA					
2996	22 54 54	61 15.5	19	1.7	1.34	-.40		60377							
2997	22 54 55	61 46.9	32	2.5		-.76	-2.95								
2998	22 55 0	-40 50.9	13	3.9	1.09		-4.29								
2999	22 55 32	50 33.6	17	1.3	1.48	-2.00	-3.36								
3000	22 55 33	62 21.5	15	1.2	1.62	-1.31	-3.38			SHARP. 155					

TABLE OF OBSERVATIONS

CRL	RA(1950)	DEC(1950)	EA	ED	M(4)	M(11)	M(20)	IPC	BS	COMMENTS	L	I	B	I	M
	H	M	S												
3001	22 55 39	21 13.3	12	2.0	1.65	-1.04		20543		DO 21915	91	-34			2-3
3002	22 55 51	28 20.1	12	2.1	1.14	-1.07				DO 21906	95	-28			2-3
3003	22 56 33	24 38.8	12	1.9	1.66	-1.40		20544		DO 21933	109	-1			3-3
3004	22 56 38	58 30.5	17	1.3						SHARP. 152	56	-60			2-2
3005	22 56 59	-13 23.1	10	2.7	1.37	-0.92	-2.94	-10590	8741						
3006	22 57 52	56 40.7	14	1.2	.65			60379	8752		108	-3			3-3
3007	22 57 55	35 38.4	13	1.9	1.10			40527		DO 21951	99	-22			2-3
3008	22 58 23	0 11.9	15	3.5	1.13						R	75	-52		1-1
3009	22 58 34	14 11.2	16	3.0	1.11						27	-41			1-2
3010	22 58 42	46 14.0	12	1.4	.70	-0.59		50454		BC AND EO	104	-12			3-3
3011	22 58 48	64 2.8	16	1.3	.87	-1.38	-3.33				111	4			4-4
3012	22 59 9	32 20.6	11	1.4	.57	-0.89		30503		DO 21968	98	-25			3-3
3013	22 59 11	61 17.6	18	1.3	.76	-0.97		60381		DO 42369	110	1			3-3
3014	22 59 13	56 48.6	17	1.5	1.86			60360	8761		108	-3			2-2
3015	22 59 36	45 37.3	16	1.9	1.62			50455		VY AND	104	-13			2-3
3016	23 0 1	59 32.1	17	1.3	1.45	-1.43		60382		AS CEP	110	-0			3-3
3017	23 1 19	27 48.5	9	1.7	-2.57	-2.57		30504	8775	BET PEG	96	-29			3-3
3018	23 1 30	37 34.9	11	1.4	.52	-1.12		40528		CF AND	101	-20			3-3
3019	23 2 39	-22 44.6	10	2.7	1.44			-20627			38	-66			2-2
3020	23 2 42	56 52.3	28	2.5	1.43						R	109	-3		1-2
3021	23 3 17	65 7.9	25	2.9		-1.04	-4.10				112	5			2-4
3022	23 3 27	59 59.6	35	2.9		-1.47	-3.56			SHARP. 156	R	110	0		1-2
3023	23 4 7	10 15.5	11	2.3	-0.16	-1.40		10527		R PEG	85	-45			2-2
3024	23 4 34	9 7.7	9	2.1	.59			10528	8795	55 PEG	85	-46			2-2
3025	23 4 35	-25 53.8	10	2.5	1.42			-30464			31	-67			2-2
3026	23 4 40	25 11.4	8	1.4	1.42			30506	8796	56 PEG	95	-32			3-3
3027	23 5 3	46 6.4	14	1.6	1.49			50458	8804	4 AND	105	-13			2-3
3028	23 6 2	16 58.3	11	2.3		-1.50				DY PEG	91	-39			2-3
3029	23 6 24	-30 24.2	10	2.7	-0.10	-1.56		-30465		Y SCL	19	-67			2-2
3030	23 6 50	-21 23.7	11	3.9	.35			-20629	8812	68 AQR	42	-66			1-2
3031	23 6 51	8 23.2	9	2.0	-0.59	-0.92		10529	8815	57 PEG	95	-47			2-2
3032	23 6 54	75 7.6	23	1.2	1.77	-1.56	-2.43	80056	8819	PI CEP	115	14			3-4
3033	23 7 21	-40 51.8	12	3.9	.67			-40330E			354	-65			1-1
3034	23 7 41	33 29.9	10	1.4	-0.35	-0.62		30507		DO 22065	100	-25			3-3
3035	23 7 46	17 48.0	11	2.1	1.37						92	-39			2-3
3036	23 7 51	0 1.9	15	3.7	1.01						77	-53			1-1
3037	23 7 54	39 55.2	14	1.7	1.41			40530			103	-19			2-3
3038	23 8 11	-11 58.1	10	2.2	1.18						61	-62			1-2
3039	23 8 37	4 42.9	11	2.2	-0.24			527		DO 7959	82	-50			2-2
3040	23 8 51	0 11.1	15	3.7	.89						78	-53			1-1

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	H M S	O	S								O	O	
3041	23 9 9	52 37.2	13 1.3		.49	-.61		50459		SS AND	108	-.7	3-3
3042	23 9 14	48 43.6	14 1.4		1.22			50460		DO 42641	107	-.11	3-3
3043	23 9 35	-5 35.5	5 1.9		1.41	-1.94	-2.99				71	-.58	1-2
3044	23 9 39	59 24.8	14 1.3		.41	-.76		60389		V CAS	111	-.1	3-3
3045	23 10 21	63 41.7	19 1.3		.70	-.63		60390		CK CEP	112	3	3-3
3046	23 11 6	66 47.1	13 1.3		1.51	-2.09		70193		DC 42709	114	6	4-4
3047	23 11 17	-27 1.9	16 3.6		1.20						28	-.68	1-2
3048	23 11 35	61 12.4	13 1.2		1.45	-3.08	-6.42			N 7538	112	1	3-3
3049	23 11 40	-6 20.8	13 4.1		-.20			-10593	8834	PHI AOR	71	-.59	1-2
3050	23 11 55	-34 9.6	11 3.6		1.25						9	-.68	1-2
3051	23 12 17	40 30.8	12 1.3		1.15	-1.46		40531		TY AND	104	-.18	3-3
3052	23 13 1	63 55.2	17 1.6		1.44			60392		DO 42753	113	3	2-3
3053	23 13 21	60 50.1	16 1.2			-1.34	-4.13	60394		DO 42805	R	0	3-3
3054	23 13 22	-9 19.4	10 2.7		1.33			-10596	8841	PS11 AUR	67	-.61	2-2
3055	23 13 36	-16 55.6	12 4.1				-3.62				53	-.66	1-2
3056	23 13 52	62 4.0	17 1.1		1.09	-.69		60393		DO 42787	112	1	3-3
3057	23 13 54	59 45.8	14 1.2		1.78	-.31	-3.27			SHARP. 157	111	-.1	3-3
3058	23 14 12	-8	10 2.7		-.62	-.62		-10597	8850	CHI AOR	69	-.60	2-2
3059	23 14 15	10 18.3	7 1.7		.09	-1.03		10531		EO PEG	88	-.46	2-3
3060	23 14 27	-28 43.9	10 2.7		1.79			-30467			24	-.69	2-2
3061	23 14 35	30 9.6	27 2.4		1.71	-1.08		60395			112	-.0	2-3
3062	23 14 37	3 1.1	16 3.5		.82			528	8852	GAM PEG	82	-.52	1-1
3063	23 14 39	32	13 1.6				-3.17			BRIGHT NEB	101	-.26	2-3
3064	23 15 13	40 35.1	15 1.5		1.26			40533		DO 42841	104	-.19	2-3
3065	23 15 21	48 44.3	12 1.4		.15	-.62		50462	8860	8 AND	108	-.11	3-3
3066	23 16 1	-32 52.1	10 2.8		1.08			-30468	8863	GAM SCL	12	-.69	2-2
3067	23 16 27	82 45.7	111 4.3		1.15	-3.27	-4.31			AN CEP	120	21	2-5
3068	23 16 41	16 54.5	8 1.7								94	-.40	3-3
3069	23 16 46	-38 4.2	11 3.5		1.36						358	-.68	1-1
3070	23 16 53	56 55.6	17 1.4				-3.62	60398		DO 42892	111	-.3	2-3
3071	23 16 54	-32 47.9	10 2.8				-2.73				12	-.69	2-2
3072	23 17 10	-28 50.8	16 3.9			-2.31					24	-.70	1-2
3073	23 17 15	62 28.9	17 1.1		.53			60397		SVS 5702	113	2	3-3
3074	23 17 23	48 23.0	14 1.4		.65			50463	8874	BE AND	108	-.11	3-3
3075	23 17 25	26 0.0	7 1.3		-.95	-2.18	-3.40	30509		W PEG	99	-.32	3-3
3076	23 17 53	8 36.5	11 2.4		.77			10533		S PEG	88	-.48	2-2
3077	23 17 53	46 57.5	14 1.6		1.59					EU AND	107	-.13	2-3
3078	23 18 12	30 8.9	13 1.9		1.41			30510	8882	63 PEG	101	-.28	2-3
3079	23 18 26	60 53.9	20 1.5			-.38	-3.51			N 7635	112	0	2-3
3080	23 18 32	39 20.8	14 1.7		1.72			40535		RY AND	105	-.20	2-3

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	H M S	O	S												
3021	23 19 15	12 17.9	11	2.3			-3.44			EI PEG	91	0	45	2-3	
3082	23 19 32	-10 43.9	12	4.1	1.23						67	-63	1-2		
3083	23 20 6	-11 7.4	16	3.7	.74					SV AQR	67	-64	1-2		
3084	23 20 7	25 37.7	10	1.7	1.77						99	-33	2-3		
3085	23 20 12	59 1.9	16	1.2	.71					V398 CAS	112	-2	3-3		
3086	23 20 16	-20 24.1	10	2.6	1.09						47	-69	2-2		
3087	23 20 17	59 50.5	15	1.1	1.24				8892	98 AQR	112	-7	3-3		
3088	23 21 17	39 26.3	11	1.4	-.08				8894	DO 42962	105	-20	3-3		
3089	23 21 47	3 23.8	16	3.5	1.06					BU AND	85	-53	1-1		
3090	23 21 52	-2 6.5	16	3.5	.98					DO 7994	90	-57	1-1		
3091	23 22 18	62 .9	16	1.1	.45						113	1	3-3		
3092	23 23 14	-11 25.7	8	2.3	1.34					4 CAS	67	-64	2-2		
3093	23 23 21	-20 56.5	10	2.7	1.10						47	-69	2-2		
3094	23 23 29	52 42.7	14	1.4	1.20					99 AQR	110	-8	2-3		
3095	23 23 45	-34 45.6	17	4.0			-4.97			DO 43042	6	-70	1-2		
3096	23 24 18	-33 46.2	16	3.7			-4.19				9	-71	1-2		
3097	23 24 26	5 3.3	16	3.7	.96						28	-51	1-1		
3098	23 24 45	80 9.6	54	2.5							119	18	2-5		
3099	23 25 45	10 38.4	9	1.9	1.15		-3.14				92	-47	3-3		
3100	23 26 36	11 9.8	11	2.2	1.94					N 7683	93	-47	2-3		
3101	23 26 52	38 21.6	13	1.5	1.34						106	-21	2-3		
3102	23 27 0	50 57.2	17	1.6	1.65					DO 22260	110	-10	2-3		
3103	23 27 1	56 24.1	16	1.4	1.55					DO 43149	112	-4	2-3		
3104	23 27 2	51 25.3	14	1.6	1.34					V356 CAS	110	-9	2-3		
3105	23 27 6	-17 1.8	11	3.9			-4.05			DO 43142	57	-68	1-2		
3106	23 27 35	-17 49.3	16	3.8	.96						56	-69	1-2		
3107	23 27 37	59 9.2	19	1.5	1.28					DO 43171	113	-2	2-3		
3108	23 27 39	-17 19.5	16	3.9	1.38						57	-69	1-2		
3109	23 28 5	59 59.4	18	1.9	.48		-3.55			SVS 5744	113	-1	3-3		
3110	23 28 16	57 42.3	19	1.8	1.32					V358 CAS	112	-3	3-3		
3111	23 30 21	31 57.0	19	2.5	1.49						104	-28	1-2		
3112	23 30 21	45 51.1	12	1.4	1.38		-3.73			DO 43251	109	-15	3-3		
3113	23 30 50	22 13.5	12	2.1	.35					71 PEG	100	-37	2-2		
3114	23 31 17	31 4.0	11	1.6	1.47				8943	72 PEG	104	-29	2-2		
3115	23 31 30	20 34.2	10	1.8	.87		-1.03			DO 22300	100	-38	2-2		
3116	23 32 0	43 15.9	12	1.3	.26		-4.46				108	-17	3-3		
3117	23 32 19	71 22.2	46	3.2	1.81					DO 43318	117	10	2-5		
3118	23 32 24	-5 34.5	15	3.9	.27						80	-62	1-1		
3119	23 32 34	2 50.0	16	3.7			-4.43				89	-55	1-1		
3120	23 33 24	24 15.8	10	2.1	1.23						102	-35	1-2		

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	H M S	O	S												
3121	23 33 41	-16 5.4	15	3.7			-4.17						62	-69	1-2
3122	23 35 5	46 11.3	12	1.4	1.15			50471	8961	LAM AND			110	-15	3-3
3123	23 35 6	-5 .4	16	3.7	.20								82	-62	1-1
3124	23 36 0	61 38.3	22	1.5	1.36			60415		1.378			114	0	2-3
3125	23 36 37	51 58.4	11	1.2	-.50	-1.66	-3.31	50474		SV CAS			112	-9	3-3
3126	23 37 1	32 3.4	13	1.8	.65	-1.11		30515		DO 22364			106	-28	2-2
3127	23 37 10	77 20.4	30	1.7	.71	-.65		80057	8974	GAM CEP			119	15	5-5
3128	23 38 19	70 7.2	29	3.1	1.46			70199		DO 43444			117	8	2-5
3129	23 39 2	-31 47.7	16	3.9	1.17								13	-74	1-2
3130	23 39 37	-18 58.4	15	3.9	.93								57	-72	1-2
3131	23 39 48	18 10.0	17	2.7	1.32					DO 22382			101	-41	1-2
3132	23 39 55	44 39.7	14	1.8	1.46			40543	8986				110	-16	2-3
3133	23 39 56	64 14.0	20	1.3	1.25			60416	8989				116	3	3-3
3134	23 40 3	32 55.5	19	2.5	1.13								107	-27	1-2
3135	23 40 46	10 2.4	11	2.1	.40			10540	8991	77 PEG			97	-49	2-2
3136	23 41 12	-15 34.4	7	2.3	-1.80	-3.76	-4.21	-20642	8992	R AOR			55	-70	2-2
3137	23 41 24	24 25.7	17	2.8	1.62								104	-36	1-2
3138	23 41 40	61 30.1	13	1.1	.15	-2.42	-3.96	60417		P2 CAS			115	-3	3-3
3139	23 41 47	55 30.6	22	1.9	1.64					DO 43509			114	-6	2-3
3140	23 42 4	41 47.1	12	1.4	1.28	-.79		40544		DO 43536			110	-19	2-2
3141	23 42 10	56 17.4	16	1.5	.56	-1.15		60418		Z CAS			114	-5	2-3
3142	23 42 15	56 57.4	17	1.6		-.62				EG CAS			114	-4	2-3
3143	23 42 33	43 38.2	12	1.5	.99	-1.20		40545		EY AND			110	-17	2-2
3144	23 43 7	41 6.0	20	1.8	1.43								110	-20	1-2
3145	23 43 24	60 12.1	27	2.4	1.26			60421					115	-1	2-3
3146	23 43 40	-7 9.5	16	3.8	1.03								83	-65	1-2
3147	23 43 49	3 11.4	7	1.7	-1.13	-1.89			9004	TX PSC			93	-56	2-2
3148	23 43 55	54 13.0	15	1.4	.81	-.82		532		RT CAS			113	-7	3-3
3149	23 44 3	6 33.3	15	3.4		-2.92		50478		N 7751			96	-53	1-2
3150	23 44 15	28 8.6	13	2.2	1.30	-.78		30517		DO 22443			105	-32	2-2
3151	23 44 44	39 14.9	14	1.6									110	-22	2-2
3152	23 44 45	57 9.6	22	2.0	1.48								114	-4	2-3
3153	23 45 0	25 51.2	12	2.2	1.21			60422	9010	DO 43605			105	-35	2-2
3154	23 45 3	68 17.6	13	1.2	1.80	-1.54	-3.85	30518		DO 22440			117	6	4-5
3155	23 46 22	21 47.9	17	3.0	1.58					DO 22462			104	-39	1-2
3156	23 46 40	76 39.3	32	3.0		-.71				SVS 5792			119	15	2-5
3157	23 46 42	75 19.4	29	1.1	1.38	-.70							119	13	2-5
3158	23 48 18	17 13.5	11	1.4	1.28								112	-14	2-3
3159	23 48 33	20 7.6	17	3.1	.78			50479		TZ AND			104	-40	1-2
3160	23 48 36	9 .9	15	3.3	.81			10541	9030	DO 22483			99	-51	1-1
										60 PEG					

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	H	M	S										R	O	O			
3161	23 48 45	26 53.4	13	1.7				-1.15				CR PEG	107	34		2.2	2.2	
3162	23 48 51	5 25.8	15	3.4			1.68							97	54		1.2	
3163	23 49 11	8 46.7	16	3.0			.93			10542		DO 8089		59	51		1.1	
3164	23 49 28	2 37.7	11	2.6			1.50			533	9033	22 PSC		95	57		2.2	
3165	23 49 35	61 31.6	16	1.2			.37	-2.33	-3.46	60427				116	0		3.3	
3166	23 49 48	18 50.5	10	1.7			.49			20555	9036	PHI PEG	104	42		2.2	2.2	
3167	23 50 14	-12 16.3	7	2.2			1.35			-10607			78	70		2.2	2.2	
3168	23 50 19	60 42.5	26	2.8			1.45	-1.39		60428		12 CAS		116	1		2.3	
3169	23 50 34	-1 38.1	16	2.9			1.09						92	61		1.2	1.2	
3170	23 50 45	66 16.4	28	1.7			1.37			70302			117	4		2.4	2.4	
3171	23 50 59	-1 22.8	16	3.1				-1.93					92	60		1.2	1.2	
3172	23 51 41	-41 43.8	9	3.7					-4.26				339	71		1.2	1.2	
3173	23 52 2	57 12.4	19	1.9			1.68			60429	9045	RHO CAS	115	5		3.3	3.3	
3174	23 52 5	-0 12.3	9	2.2			.21			535	9047	SVS 5807	94	60		2.2	2.2	
3175	23 52 38	75 9.9	28	1.0			1.66						119	13		3.5	3.5	
3176	23 52 48	48 21.9	17	1.6			.07	-1.28		50413		RS ARD	113	13		2.2	2.2	
3177	23 53 28	14 57.1	16	3.0			1.09			10544		DO 22554	104	46		1.1	1.1	
3178	23 53 51	-19 9.2	15	3.9			.46						63	75		1.2	1.2	
3179	23 54 5	62 24.8	18	1.3					-3.14			OD CAS	117	0		2.3	2.3	
3180	23 54 6	22 21.9	10	1.8			1.26			20556	9055	DO 22562	107	38		2.2	2.2	
3181	23 54 17	70 30.8	30	2.2				-1.17					118	8		2.5	2.5	
3182	23 54 26	-12 12.9	16	3.8			1.40		-4.51				90	70		1.2	1.2	
3183	23 54 27	32 3.4	13	1.8			1.40			30521		DO 22564	110	29		2.2	2.2	
3184	23 55 2	60 44.3	28	2.5			1.57			60430			116	1		2.3	2.3	
3185	23 55 8	23 45.3	17	2.7			1.81						107	37		1.2	1.2	
3186	23 55 12	24 51.0	13	2.0			.08	.44		20557	9064	PSI PEG	108	36		2.2	2.2	
3187	23 55 37	56 12.4	14	1.5			.94	.85		60431		WY CAS	116	6		2.3	2.3	
3188	23 55 59	51 5.9	8	1.2			-2.58	-4.25	-4.57	50484	9066	R CAS	115	11		3.3	3.3	
3189	23 56 10	-39 42.5	9	2.1			.69	-2.54	-4.06	-30501E		RR PHE	341	74		2.2	2.2	
3190	23 56 57	-29 50.6	8	3.8			1.00			-30472	9073		18	78		1.2	1.2	
3191	23 57 3	-4 25.3	11	2.6				-3.99				1 1524		92	64		2.2	2.2
3192	23 57 10	-15 24.8	9	3.8				-3.23						75	73		1.2	1.2
3193	23 57 18	67 4.4	29	1.8				.98	-1.71			E0	118	5		2.5	2.5	
3194	23 57 34	25 36.7	12	2.2			.73	.22		30522		2 PEG	109	36		2.2	2.2	
3195	23 57 42	14 44.6	16	3.0			1.60						105	46		1.1	1.1	
3196	23 58 39	60 4.3	15	1.9			.18	.93		60433		WZ CAS	117	2		2.3	2.3	
3197	23 58 29	-6 16.4	15	4.1			.87	-1.08		-10608	9089	30 PSC	92	66		1.2	1.2	
3198	23 59 44	-21 17.1	14	4.0			1.45						29	77		1.2	1.2	

## Part II - Multiply Observed Sources

### 1. MULTIPLY OBSERVED SOURCES

The individual observations of multiply observed sources are given in this section. The table is divided into three main data blocks. In each data block, the first column lists the CRL number, the next three give the magnitudes measured at 4.2, 11 and 19.8 microns respectively, and the last column gives the Julian date of observation. The blank entry, asterisk(\*) and "less than" sign (<) have the same meaning as in the main Table of Observations.

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MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1				2441000+	21	1.11			132	51	1.91			2441000+
1		-1.18		132	21	1.07			335	51	1.94		-2.65	132
1		-1.10	-3.39	548	21	.66			657					335
2	1.76			335	22	.96			132	53	-1.29	-1.91		548
2	1.49			423	22	.86	-.50		335	53	-1.30	-1.73		657
3		-1.05	-3.36	132	24	1.35			132	55	1.81			132
3		-.67		335	24	1.82			335	55	1.52	-.64		335
4	1.72			132	24		-4.35		657	56	1.79			132
4	1.87			335	27	1.12			132	56	.97			335
5	.26	-1.09		132	27	1.72			335	57	-1.38	-2.81		132
5	-.18	-1.46		335	28	.45			132	57	-1.70	-2.66		335
5	.07	-1.54		657	28	.53			335	57	-1.89	-2.37		657
7	1.12			335	29	1.15			548	50	1.54			548
7	1.09			548	29	1.31			657	50	1.72			657
7	.98			657	35	1.73			132	59	-1.18	-3.20		132
8	1.53			132	35	1.97			335	59	-.30	-2.49	-3.36	335
8	1.35			335	35			-2.15	423	60	.88	-.64	-3.12	132
9	1.23			132	35	1.52			657	60	1.76			335
9	1.22			335	37	.05			335	60	1.29	-.90		423
12	1.17			132	37	.16			548	60	1.25	-.50		548
12	.81			423	37	.24			657	60	.98			657
12	1.31			657	39				132	63		-.91		132
13	1.50			132	39		-.71		335	63		-.87		335
13	1.31			335	40	-.28	.13		548	64	.36			548
14	.17	-2.78		132	40	-.67	-1.58		657	64	-.08			657
14	.64	-2.36	-2.83	335	41	1.47			132	66	-.31	-1.65		335
16	1.65			548	41	1.53			335	66	-.25	-1.05		657
16	1.65			657	45	1.52			335	67	.35	-2.41		132
17	1.15	-.76		548	45	1.45			335	67	1.02	-1.91		335
17	.99			657	48	.87			657	67	1.31	-2.34		423
18	1.49			548	48	1.05			335	67	1.47	-1.47		548
18	1.40			657	48	.50			548	67	.18	-2.32		657
20	1.46			132	50	.20	-1.13		132	68	1.37	-1.83		132
20	1.66			335	50	.10	-.94		335	68	.73	-1.16		335
										69		-1.73		548
										69		-1.38		657

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
70	1.14			2441000+	91	1.19			2441000+	112				2441000+
70	1.25			548	91			-4.00	254	112	1.52			132
73	1.02		-2.88	657	91	.90	.09		423	112	1.58			335
73	.93			132	92	1.48			548	112				657
74	1.73			335	92	1.61			132	113	1.54			132
74	1.72			132	92	1.29			254	113	1.39			254
76	1.53			335	92				335	113	1.63			657
76	1.07			132	92				657	114				132
78				423	93					114	1.64			335
78				548	93				423	115				335
79	1.49			657	95	1.38			254	115	2.20			657
79	1.46			132	95	1.55			335	116	1.62			657
80	1.69			423	96	1.51			132	116	.86			254
80	1.19			335	96	1.77			335	116	.76			335
83				548	97				132	117	1.55			657
83				657	97				423	117				132
84	1.96			335	99	1.77			132	117	.80			254
84				548	99	1.89			423	119	1.38			335
85				657	99	1.54			657	119	1.91			335
85				132	100	.54			132	120	1.46			254
86	1.62			335	100	.15			254	120	1.03			335
86	1.00			548	100	.45			335	120	1.50			657
87	1.42			657	100	.58			657	121	1.51			254
87	1.63			132	104	1.80			254	121	1.55			335
88	1.37			335	104	1.80			335	121	1.47			423
88	.74			548	105	1.43			657	122	1.41			254
89	1.38			657	105	1.09			132	122	.92			335
89	1.08			132	106	.54			548	125	1.68			132
90	2.03			335	106	.53			657	125	1.49			335
90	1.44			548	107				132	127	1.31			132
				657	107				423	127	1.23			335
				132	107				657	128	1.90			132
				335	107	.51			548	128	1.62			335
				548	107	1.60			657	129	1.44			657
				657	109	1.37			254	129	.95			254
				132	109	1.04			335	129	.72			335
				423										
				657										
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MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
130				2441000+	153	1.02			132	177	.24	-1.16		2441000+
130				548	153	1.38			132	177	-.07	-1.37		132
131				657	153	1.51			423	177	-.09	-1.58		254
131					154	1.88			335	181				335
131					154	1.03			657	181				254
132					156	.85				183				657
132					156	1.35			548	183				254
133					157				657	183				657
133					157					184	1.38			132
133					157	-.44			254	184	1.35	-.40		254
134					158				235	184	1.18			335
134					158	1.48			335	184	1.35			335
134					158	1.22			548	184	1.08			548
135					160	1.48			657	184				657
135					160	1.57				185				132
136					161	.71			254	185				548
136					161	.43			335	186				132
137					161	.18			548	186				335
137					161				657	186				423
137					163	1.31				186				548
137					163	1.13			254	189	1.37			657
137					163	1.24			335	189	1.38			132
141					165				548					254
141					165	1.71			657					132
145					166				254					132
145					166	1.49			335					254
146					167	.77				190				132
146					167	.95			254	190				254
147					167	.74			335	190				535
147					169	1.54				190				535
147					169	1.12			254	190				548
149					169	1.06			335	190				657
149					175	1.67				190				548
149					175	1.23			254	190				657
149					176				335	190				132
151					176				548	190				254
151									657	190				335

MULTIPLY OBSERVED SOURCES

CRL	M(4)	N(11)	N(20)	J.D.	CRL	M(4)	M(11)	N(20)	J.D.	CRL	M(4)	M(11)	N(20)	J.D.
200	1.41			2441000+	223	1.76			2441000+	240	.95	-.77		2441000+
200	1.37			132	223	1.90			254	248	1.12			335
				335					335					548
202	1.56			132	224	1.21			254	249	*	-1.70		548
202	1.58			335	224	1.11			335	249	*	-.94		657
203	1.53			335	226	.96			254	251	1.25	-1.43		132
203	1.39			657	226	1.61	-.73		335	251	1.22			254
205		-1.72		132	227	1.60		*	132	252	1.11			254
205	*	-.95	-2.24	254	227	1.22			254	252	1.53			335
205		-.91	-3.16	335	227	1.19			335					
205	2.31	-1.68	-3.70	657						253	.42	-1.26		132
206			-4.33	254	229	1.48			423	253	*	-1.11		254
206			-2.69	335	229	1.52			657					
207			-3.36	335	230	1.34	-1.41	*	132	254	1.36			335
207			-3.42	423	230	*	-1.69	-2.87	254	254	1.22			657
209	1.70			548	230	1.98	-1.82	-3.05	335					
209	1.36			657						255	.94			254
210	.84			335	231	.85			548	255	.83			335
210	.95			548	231					255	.88			548
211	.87			132	234	1.91			335	256				254
211	1.61			254	234	*	-2.30		548	256		-1.43		132
211	1.15	-.84		335	234		-1.33		657	258	1.80	-.23		254
211	*	-.83		657										
213	1.29			254	235	*	-1.28	-3.08	548	259	1.40			132
213	1.62			335	235		-2.23	-2.23	657	259	1.07			254
213				423										
215	1.81	-1.72		548	236	1.55			254	262	1.51			254
215	-.86	-2.08		657	236	1.34			335	262	1.17	-.75		335
215			-1.86											
216	1.43			254	238		-1.25	*	132	265	.91			132
216	1.59			335	238		-1.09		335	265	1.76			254
219	1.58			335	240	1.22	-.70		335	265	.91			335
219	2.05			657	240	1.54			548	265	.99			657
221				254	244	*	-1.32		254	270	1.36			132
221	1.86		-2.99	335	244		-1.41		335	270	2.17			254
221	1.44			423										
221	*	-.52		548	246	*	-1.17		254	272	1.87			335
					246	*	-1.37		657	272	1.22			548
					247	2.49			254	272	1.32			657
					247	1.63			335					

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
273	1.03			2441000+	291		-1.21		2441000+	318	-3.52	-5.10	-6.03	2441000+
273	.85			45	291		-1.43		132	310	-3.07	-4.48	-5.36	254
273	.51			132					335	310	-3.82	-5.46	-5.74	335
273	.32			335	295	1.22			254					548
273	.29			423	295	1.20			335	319	1.51		-2.66	254
273	.40			548					548	319	1.15			548
273				657	296			-3.69	548					
279	1.53			254	296		-.97	-3.72	657	320	1.39			132
279	1.71			335					254	320	1.12	-1.18		254
280	.32	-1.89		132	297	.69	-1.24		335	320	.20	-1.18		548
280	.32	-.86		254	297	.72			548	321	.74			254
281	2.03		-2.22	254	297	.60			132	321	.69			335
281				548	298	1.73	-.87		254	323	.47			548
281		-.96	-2.80	657	298	1.50			548	323	-.03	-2.76	-3.80	132
282	1.78			254	301	1.33			254	323	.14	-2.64	-3.32	254
282	1.67			335	301	1.11			548					548
282	1.60			548	305	1.21			132	324		-.79	-2.60	335
283	1.54	-1.43		254	305	1.26			254	324				423
283	1.61			335	305	1.07			335	325		-1.25		423
283		-.83		657	305	.84			548	325		-1.15		657
284	.90			335	306			-2.54	335	326	1.02	-3.54	-6.49	132
284	.38	-.46		548	306			-2.88	548	326	1.63	-3.44	-6.90	254
284	.82			657					132	326	.67	-3.57	-6.83	548
285	1.28	-1.50		132	309		-.89		423	326	.92	-3.46	-7.15	657
285	1.67	-.75		254	309		-2.09		132	327	.78			132
285	1.67	-.81		335	311	1.07			423	327	2.16	-2.36		254
285		-.28		548	311	1.61			132					254
286	-.05	-.87		335	311	.44	-.59		335	328		-1.29	-4.20	132
286	-.28			657	311	1.62			548	328		-1.11	-4.08	254
287	-.32	-1.44		254	312		-.44		657	328		-1.44	-4.73	548
287	-.79	-.71		335	312		-1.39		335			-2.12	-3.32	657
287	-.66			548					548	330		-1.67		132
288	2.00			335	314	1.02			132	330		-.47		548
288	1.87			657	314	1.36			335					
289	1.65			132	315	1.54			548	331		-1.79	-3.20	254
289	1.56			548	315	1.33			657	331			-3.69	548
289	1.78			657					254	332	1.27	-1.58		254
									548	332	1.05	-1.44		657

# MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
333	•	-1.01		2441000+	357	-48	-2.97		2441000+	379	-27			2441020+
333		-74		254	357	-53	-2.76	-3.71	254	379	-39	-1.19	-3.27	254
333		-1.48		657	357	-20	-1.52	-2.67	335					548
337	-58	-2.13		335	357	-25	-2.51		548	380	.86			254
337		-2.70		548	358	•	-.65		657	380	1.13			548
337	-87	-2.73	-4.55	657	358	•	-1.51		335	380			-3.49	657
338		-1.39		335	359	1.28			548	381	.72	-1.20		254
338	•	-1.60		657	359	1.40			548	381	•		-3.13	548
339	1.51		-2.87	254	360	1.50			132	384	1.50			254
339	1.90			335	360	1.81		-1.99	423	384	1.43			548
339	1.12			657	360	1.46			548	386	.97			254
340	1.12			132	361		-1.81	-3.08	132	386	.80	-.61		548
340	.95			254	361		-1.92		657	387			-3.00	254
340	1.09			335	366			-4.64	335	387			-3.04	548
340	1.30			657	366	1.13			548	389		-1.04		254
341	•	-.80		254	368		-.88		132	389		-.87		548
341		-1.84		548	368	1.49			254	390		-.89	-2.70	254
343		-.51	-2.83	548	368	1.87	-.68		657	390		-.32	-2.66	423
343			-3.24	657	369				254	392	.09			254
344			-2.48	254	369	1.93			335	392	.10			335
344			-2.46	335	370	1.75			548	392	-.06			548
345			-2.70	254	370	1.34			335	393	1.51			132
345	1.66			335	372	1.36			548	393	1.24			254
345	1.09			423	372	1.32			335	393	1.53			335
346	1.55			335	372	1.34			548	393	1.69	-.93		423
346	1.70			548	372				657	393	1.26			548
346			-3.83	657	373	.91			132	393	1.55			657
348	1.78			254	373	.76	-.28		254	395	1.82			335
348	1.63			657	373	.45	-.87		548	395	1.89			548
349	•	-2.87		132	374		-.75		335	396	.02			254
349	.25	-3.26	-4.25	254	374		-1.27	-3.17	548	396	-.01			548
349	.84	-2.32		548	378	.74	-1.24		254	398	1.45	-1.57		423
349	.31	-2.64		657	378	.10	-.80		335	398		-.22		548
354	1.14			254	378	-.00	-.55		548	399	•	-.88		254
354	1.35	-.90		335	378	-.11	-1.04		657	399	•	-1.88		548
354	1.02			548										

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
400	.10	-.01		2441000+	425	.88			2441000+	450				2441000+
400	.28	-.63		254	425	.64			254	450	1.83		-2.38	254
				548					548				-2.59	335
401	-1.46	-1.15		254	428	.	-2.23		254	453	.43	-.75		254
401	.	-1.32		548	428	-2.44	-2.75		548	453	.16			548
403	1.35			254	430			-2.66	335	453	.11			657
403	.96			335	430	.	-3.00		548	457	1.80			254
403	.59			548	430			-4.59	657	457	.73		-2.72	423
405	.79			254	431		-2.57		335	457	1.45			548
405	.63			548	431		-1.35		657	457				657
406	1.36			132	432	.89			132	458			-4.24	335
406	1.88			657	432	1.21			254	458			-3.71	657
408	.			254	432	1.25			335	460	1.42			254
408	.		-2.75	548	432	.88			657	460	1.58			657
411			-3.49	254	434	.26	-2.17	-3.12	254	464	.67	-1.07		254
411		-1.28	-4.10	657	434	.65	-2.00	-3.54	548	464	.52			548
413	1.02			254	435	1.85			335	466	1.01			132
413	1.35			548	435	1.38		-2.63	548	466	1.32	-.20		254
415				335	439	.30			254	466	1.14			657
415	.84	-.49		657	439	.13			335	467	1.34			254
416				254	440	.20			548	467	1.19			548
416		-.68		548	440	1.31			254	468			-3.06	254
416		-.38		657	440	.95			548	468	.		-4.23	548
		.25			440	1.28			657	469	1.40			254
418	1.07			335	443	1.54			254	469			-3.06	548
418	.90			423	443	1.71		-2.14	548					
418	.74			548	444				132	470	1.12			548
418	.78			657	444	1.69			657	470	2.15		-3.24	657
419	-1.97	-1.83		254	444	1.05				472	1.74			132
419	-1.97	-2.16		548	445				335	472	1.54			335
					445	1.43			657	472	1.75			548
420				254	446				254					132
420			-3.14	657	446		-1.49		548	473	1.75		-3.17	254
			-4.55		446		-.78			473	2.05			335
421	.			254	449	1.02			254	473				657
421			-2.92	335	449	1.01			548					
423			-2.19											
423	.99	-1.31		335										
				548										

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
475	-1.28	-1.40		254	497	1.45			254	515	1.21			2441000+
475	-1.52	-1.55		335	497	1.11			254	515	1.36		-2.87	254
475	-1.50	-1.27	-2.75	548	497		-1.26		335	515	1.05			335
475	-1.59	-1.59		657					657					657
476	1.04			254	498		-.64		335	518			-2.50	335
476	.82			335	498		-.73		657	518			-4.20	657
476	1.29	-1.17		548	500		-1.95		254	519	.18			254
476	.98	-.57		657	500	-.47	-1.65	-2.49	335	519	.12	-.52		335
480	1.91			335	500	-.31	-1.84		548	519	.06			548
480			-3.46	548	500	-.61	-1.66		657	519	-.15	-.86		657
482	.55	-2.18		132	502			-3.65	548	520	-1.03	-1.16	-2.05	254
482	1.07	-1.76	-2.81	254	502			-3.78	657	520	-.80			423
482		-1.54		423	503			-3.31	254	520		-1.19		548
482		-1.38		548	503		-1.63	-2.99	335	520	-.89	-1.48		657
482	1.00	-2.16		657										
485	.36	-1.94		132	504	1.39			254	521	1.72			254
485	-.04			254	504	1.63			657	521	.95			548
485	-.07			548	505	-.57	-1.48		254	522	1.55			254
485	-.04	-.01		657	505	-.53	-1.25		548	522	1.18			548
486		-.95		254	505		-1.67		657	523	1.39			254
486		-1.36		548	506	.04				523	.73			657
487	.18			254	506	-.16	-1.28		254	524	1.41			423
487	.13			548					657	524	1.17			548
488	1.65			335	508			-2.79	254	525	.67	-1.34		254
488	1.81			548	508			-4.19	657	525	.47			335
488	1.40			657	509	1.48		-2.32	335	525	.61			548
489	-1.27	-3.39	-3.99	254	509	1.53			657	525	.48			657
489	-.40	-3.04		548	511	1.50			254	526	1.79	-.79	-2.40	335
491	1.19			254	511	.87	-1.49	-3.67	335	526	1.50			657
491	.90			335	513	1.08			548	530			-2.40	254
491	1.01			423	513	1.04			254	530			-3.22	548
491	1.19			657	513	1.31			335	531	1.17			254
492	.88	-.79	-2.46	254	514	-.72	-1.24		657	531	1.29			548
492	.68			548	514	.68			132					
493		-1.81		254	514	-.87	-1.23		254	532	1.75			335
493		-1.54		335	514	-.73	-1.32		335	532	1.83			657
					514	-.84	-1.13		423	533	1.25		-4.00	254
									657	533			-4.00	335



# MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
534	1.34			2441000+	552	.57	-1.15		2441000+	571	1.62			2441000+
534	1.14			335	552	.75	-1.45		254	571	1.88	-.32		335
534	2.07			548	552	.90	-.55		657	574	1.63	-.44		657
536			-3.18	657	553	.55			254	574		-1.40		335
536			-3.94	254	553	.87			335	574		-1.69		548
537	-1.26	-1.06		335	553	1.60			548	574				657
537	-1.31	-1.34		254	553	1.12			657	575			-2.57	335
537	-1.12	-1.82		335	554	1.48			335	575			-2.66	423
537	-1.26	-1.69		548	554	.		-3.12	548	577	.	-1.13		335
538			-3.94	657	554	2.19			657	577		-.69		657
538			-2.72	548	557	1.79	-1.67	-3.54	548	570		-1.23		254
539			-3.30	657	557		-.74		657	570	1.65			335
539		-1.75		254	558	.81			548	570	1.28			657
539			-4.03	335	558	.58			657	579	.26			254
540	1.44			657	559	.86			254	579	.47			335
540	1.27			254	559	.83			548	579	.42			657
541				335	559	1.49			657	580	2.03			335
541		-1.05		548	562		-1.69		254	580	.94			657
542	-1.14	-2.33	-3.32	254	562		-2.17		657	581	.25	-.80		548
542	-1.08	-2.53	-2.58	335	563	.61			254	581	.57			657
542	-.86	-2.39	-2.77	548	563	.56			335	583	.43	-.94		254
542	-1.14	-2.01	-3.52	657	563	.65			548	583	.21	-.75	-3.37	548
543	1.50			254	564	.39			657	583	.41	-1.09		657
543	1.60			335	564	.49			254	584	1.41			548
543	1.85			657	567	1.05			335	584	1.03			657
546	1.37	-1.69		254	567	1.36	-1.75		254	595	.08	-1.91	-2.63	254
546	1.18			335	567	1.27			423	595	.48	-1.88		423
546				548	567	1.10			548	595	.20	-2.29	-2.89	548
548	1.25			657	567				657	595	.40	-1.75		657
548	1.27			254	568		-1.66		548	596	1.70	-.52		254
548	1.29			335	568		-1.72		657	596	.	-1.37		657
550		-1.10	-4.12	548	569	1.44			132	593	.20		-2.18	335
550		-.68		657	569	1.74			335	593	.42			548
551	1.25			548	570	1.56			657	598	.72			657
551	.88			657	570	1.97			335	599	1.58			335
									657	599	1.54			657

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
603	1.15			2441000+	627	1.35			2441000+	663	1.42			2441000+
603	1.73			254	627	.70			335	663	1.85			132
604	1.39			335	630				657	663	1.39			423
604	1.84			657	630		-1.54	-4.17	548	664	1.70	-4.44	-5.33	548
605	.95			254	632	.96			657	664	-2.05	-4.35	-4.65	423
605	1.78			335	632	1.30			423	664	-1.60	-3.76	-4.97	548
605	.99			657	632	.74			548	667	-1.70	-2.97	-2.44	657
606	.02			254	633	.34			657	667	-1.38	-2.92	-3.15	254
606	.05			657	633	.32	-1.10	-2.43	254	667	-1.58	-2.99		335
608	.73			548	633	.35	-1.68		335	667	1.83			657
608	.46			657	633	.32	-1.21		423	668	1.49			548
610	.89			254	633	.32	-1.17		548	669	2.01			657
610	.98			335	634				657	669	1.54			254
610	.76			657	634				548	670	1.21			657
611	.			423	635	1.22			657	670	1.10			548
611	.			657	635	.90			548	671	1.27			657
613				335	636	.52			254	671	1.54			423
613				657	636	.43			423	681	.80			657
614				254	636	.51			657	681	.46			548
614	.65			335	639	.33			548	682				657
614	.56			657	639	.09			657	682	.77	-2.26		254
615	.27			254	640	1.91			335	682	.59	-1.53		335
615	.00			335	640	1.79			657	682	.51	-1.84		657
615	.19			657	644	.88			548	684	2.16			548
615	.41			254	644	.			657	684	1.94			657
617	.11			335	648	.55			548	685				335
617	.15			657	648	.74			657	685				657
619	.86			548	648	.84			254	686	1.59			548
619	1.69			657	648	1.10			423	686	1.04			657
620	.			132	650	1.59			548	686				548
620	.			548	650	1.08			657	686				657
622	1.40			548	655	1.19			335	686				254
622	.88			657	655	1.68			657	686				657
623	.			548	661	1.69			548	686				548
623	.			657	661	1.39			657	686				657

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
693	.85	-.81		2441000+	717				2441000+	748	-.16	-1.95		2441000+
693	.76			335	717			-2.46	548	748	-.03	-.99	-3.81	548
693	.77			423				-4.95	657					657
693	1.50			548	720	-.17	-1.02		548	749	1.02			548
693				657	720	.08	-1.08		657	749	1.20			657
694	1.38			335	722	1.14			548	751	.79			548
694	1.39			657	722	1.65			657	751	1.19			657
696		-1.02	-2.68	423										
696		-3.74		548	724	.77	-1.69	-2.68	254	753	.90			423
697	1.15			548	724	.98	-1.65		423	753	.80			548
697	1.34			657	724	-.05	-2.35	-2.79	548	753	.78			657
699	-.30	-1.58		254	724	.44	-2.28		657	754	.72	-1.23		548
699	-.38	-1.33		657	725	1.02			548	754	.62			657
700	.58	-1.86	-3.62	548	725	.38			657	755	1.82		-3.03	548
700	.74	-2.22		657	726	1.46		-2.60	254	755	.99			657
702	-1.82	-2.33	-3.35	335					235	756	1.18			254
702	-1.83	-2.32	-3.62	657	728	1.27			254	756	.65	-.79		335
704	.		-2.85	548	732	1.01			548	756	.66			657
704		-4.68		657	732	.95			254	757	.71	-1.53		335
708	.28			335	732	1.23			657	757	.	-1.59		657
708	.70			657	733	.	-.34			759	.61			335
709	1.05			548	733	1.32			254	759	.42			657
709	.75			657	733	.91	-1.93		335	761	1.26	-1.86		548
710	-.15			335	736	1.66			657	761	1.28	-1.05		657
710	.26			657	736	1.50			335	762			-3.03	335
713	-2.06	-2.23		548	739	1.38			657	762			-4.75	657
713	-2.20	-1.81		657	739	1.86			548	765	1.72			335
714	.		-3.74	548	740	.70		-4.64	657	765	.	-1.50		657
714	.71			657	740	.53		-2.98	335	767	-.95	-1.47		548
715	-1.17	-2.33		423	742	1.55			657	767	-1.29	-1.53		657
715	-1.31	-2.61	-2.92	548	742	1.63			335	768	1.41			335
715	-1.25	-2.70		657	746	1.20			657	768	1.42			423
716	.	-1.23		335	746	1.63		-2.52	548	771	1.30			254
716		-2.70		657	747	2.05			657	771		-.83		335
					747	1.50			548					

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
772				2441000+	804	1.31			335	826	1.42			2441000+
772		-86		335	804	1.04			657	826	.94	-90		254
		-52		657						826	1.38	-1.56		322
774	1.87			548	805	-.33	-1.77		548	826	1.08			423
774	1.87			657	805	-.41			657	827	1.71			548
776		-1.31		335	807	.46	-3.38	-4.17	335	827		-3.25		423
776		-1.22		657	807	.56	-3.65	-6.97	657					548
777	1.31			548	808	1.41			335	828	1.17			254
777	1.18			657	808	1.63			657	828	.76			335
778	1.72			335	809	.36	-2.32	-3.67	548	828	1.18			657
778	1.16			423	809	.	-2.24		657	830	1.79			335
779	-1.34	<-5.41	<-6.93	335	810			-2.69	254	830	1.83			657
779	.	-5.53	-5.53	657	810	.94			657	831		-1.1		254
779	-.89	<-4.66	<-6.44	657						831	1.48	-.44		423
781	1.54	-2.12		335	811	-.38	-2.54	-3.72	254	831	1.76			657
781		-2.58		657	811	-.86	-3.19	-4.03	335	832			-3.48	548
785				548	811	-.90	-3.40	-3.96	423	832	.87	-.28		657
785				657	811	-.50	-2.85	-3.70	548	833	1.91			335
		-.95			811	-.11	-2.53		657	833	1.48			657
		-.69	-2.85											
786	.24	-1.54		335	814		-1.68	-3.04	335	834	1.71			335
786	.54			657	814		-1.68		657	834	1.58			657
788	.27	-1.66		548	815	.71			548	836	<-3.64	-5.36	-6.05	335
788	-.26			657	815	.97			657	836		<-5.16	-5.51	657
791		-2.05	-3.40	548	816	.77			548	839	.33	-1.79		423
791		-1.47		657	816		-2.12		657	839	.06	-1.20	-3.35	548
793	.10	-.56		335	818		-1.17	-3.46	335	839	.03			657
793	.28	-.55		657	818			-4.30	657					
794	.43	-1.78		548	819	1.29			548	841	.20	-1.94		548
794	.02	-1.91		657	819	1.11			657	841	.08	-.63		657
796	.76			335	820	1.51			335	842		-1.98		423
796	.65	-.93		657	820	1.48			657	842		-1.11		548
797	.50			548	822	.38	-1.05		254	842		-1.11		657
797	.51			657	822	.45			335	842	1.32	-.78		
798	1.53			335	823	.96			548	846	1.38			335
798	1.66	-.55		657	823	1.26			657	846	1.70			657
										848	1.16			423
											1.33			548
											.74			657

CRL	M(3)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
849	.66			2441000+	878	.78			2441000+	913	.48			2441000+
849	.	-1.40		132	878	.55			254	913	.52			335
849	-.13	-2.29		335					657					657
849	-.17	-1.75	-2.65	423	881	1.04			548	915	.62	-2.64	-4.24	335
849	.33	-1.66		548	881	1.34			657	915	.48	-2.39	-3.22	657
849	.	-.85		657										
850	.90	-1.68		548	882				254	917	.	-2.51	-4.21	423
850	.	-1.38		657	882	1.07			423	917	.69			657
851	-1.08	-1.77		423					548					
851	-.94			548	884	1.64			254	919	1.18			335
851	-1.20	-1.59		657	884		-.69		335	919	1.37			657
852	.	-.60		254	884	1.24	-1.48		423	920	1.49			335
852		-.98		335	884				548	920	1.16			657
856	.41			335										
856	.37			657	888	.84			335	921	1.94	-1.19		335
862	1.58			423	888	1.37			657	921	.	-1.74		657
862	1.17			548	890				335	923	.82			335
862	1.44			657	890				657	923	1.39			657
865	.	-2.18	-2.51	335										
865		-2.46		657	900	1.48			335	925	.13			335
866	1.27			254	900	1.21			548	925	.04			657
866	1.79			548	901	1.60								
869	1.47			254	901	1.46			335	927	.39			423
869	1.59			548					548	927	.22			548
870	.	-1.52		254	902		-.90	-3.33	335	927	.14	-1.18		657
870	.48	-1.34		335	902	.		-2.39	657					335
870	.47	-1.56		657						930	2.22			657
872	.	-2.17	-2.40	254	903	.54	-.05		423	930	1.45			335
872	-.77	-2.09		335	903	.48			548	931	.88			657
873	1.46	-.80		335	903	.50			657	931	.98			254
873	1.60			657	903					931	1.31			335
874	.11			254	905	.61			335	931	1.18			548
874	.06			335	905	.74			657					657
877	.38	-2.63	-5.46	335	907	-.60	-.99		254	933	.50	-1.35		335
877	.72	-2.69		657	907	-.44			657	933	.18	-.98		657
										934	.28	-.63		335
					910	.88			335	934	.14			657
					910	1.77			657					
										937	1.48		-2.51	335

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
938	1.74	-1.42	-2.77	2441000+	956	-1.36	-2.52	-3.16	2441000+	977	.02	-1.64		2441000+
938		-1.34	-2.87	423	956	-1.83	-3.54	-3.81	254	977	.58	-1.10		335
				548	956	-1.63	-3.01		335					657
940	1.46	-1.05		335	956	-1.18	-2.44	-3.57	423	980	1.48			254
940	1.96			657	956	-1.32	-2.59		548	980	.98			335
942			-2.77	335	957	1.37			657					
942			-2.87	657	957	1.50		-3.08	335	981	1.56			335
943	1.78			335	958	1.17			548	981	1.41			657
943	1.46			657	958	.97			254	982	.28	-1.44		254
					958	.85			335	982	.51	-.85		335
944			-3.15	254					657	982	*	-.68	-2.33	423
944			-2.58	335	959	.81			335	982	.71	-1.43		548
					959	.85			657	982	.21	-1.70		657
945	.68			254										
945	.68			335	960	*		-3.66	254	985	1.01			254
945	1.11			423	960	1.55			335	985	1.01			335
945	1.03			548	960	1.14			423	987	1.72			335
945	.92			657					657	987	1.67			657
					962	.95			423					
946		-1.59		132	962	.42			548	989	1.49	-1.17	-3.09	335
946		-1.27	-2.94	335						989		-.29		657
946	1.24			657	964	1.19			335					
					964	1.07			657					
947	.50			335						991	1.52			254
947	.52			657						991	1.31			335
					966	-1.24	-2.37		423	991	1.21			423
948	1.75			335	966	-1.42	-2.11	-3.02	657	991	1.36	-.98		548
948	1.19			657						991	.97			657
					967	1.35	-.37		335					
951		-.05		335	967	1.06			657	992		-.48		335
951	1.99	-.81		657	968	-.25	-.91			992		-1.73		657
					968	-.37	-1.80	-2.94	335					
952		-1.47		423					657	994	1.17			423
952	*	-2.24		548	970	1.16	-.65			994	.74			657
					970	1.37			335					
953	1.91			423					657	997	1.29			254
953		-1.89		548	972	1.29				997	1.44			335
953	*	-1.11		657	972	1.51			254					
									335	998	1.54	-.66		335
954	1.26	-1.65		423</										

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1001	.24			2441000+	1034	.22			2441000+	1069	.	-.96		2441000+
1001	-.03	-1.04		335	1034	.47			254	1069	.	-2.46		335
				657					335					548
1003	.78			254	1036	1.12			254	1072	.	-2.13		423
1003	1.26			335	1036	.90			335	1072	1.40	-2.16		548
1003	.62	-.49		423	1036	1.18			548	1072	1.51	-1.05		657
1003	.86			657										
1004	1.52			335	1038	.24	-.96		335	1073	.85			335
1004	1.37			657	1038		-.70		657	1073	.78			657
1006		-.53	-2.84	254	1040		-.35		254	1074	1.48	-1.72	-2.47	254
1006			-2.33	335	1040		-1.07		423	1074	1.26	-1.72	-3.46	335
1007	-1.60	-1.51		254	1042	1.23			335	1075	.45	-1.35		254
1007	-.34	-1.17		335	1042	1.20			423	1075	.20			335
1009	.75			335	1045	.62			335	1079		-1.00		423
1009	1.87			657	1045	.95			657	1079		-.96		657
1010	1.43			335	1050	1.91			254	1080	1.48			335
1010	1.71			657	1050	1.66			335	1080	.89			423
1010	1.41			657	1050	1.17			423	1080	1.12			657
1015	1.62	-.51		254	1050	1.39			657	1081	1.35	-1.93		423
1015		-1.61		335	1051	1.36			335	1081	1.13			657
1019			-3.29	335	1051	1.07			657	1083	.63			335
1019			-2.81	548	1052	1.58			335	1083	.75			423
1020	1.36		-4.20	335	1052			-3.88	423	1083	.52			657
1020				657	1055	.40			335	1084	.93			254
1021	.95			254	1055	.20			657	1084	.99			335
1021	.52	-.42		335	1056	1.08			335	1084	1.17			548
1021	1.01			423	1056	1.68			657	1084	1.14			657
1021	.69	-.86		548	1059	1.19			335	1086	.52	-1.08		335
1021	.49			657	1059	1.14	-1.77		254	1086	.34	-1.01	-3.35	657
1022	.06	-.72		335	1060	.87	-1.39		335	1087	1.15			254
1022	.44			657	1060	1.51	-1.54		254	1087	1.41			335
1025			-2.24	254	1062	1.06	-1.20		335	1089	1.55			335
1025		.74	-2.29	423	1062	1.77	-1.87		254	1089	1.59	-1.36		657
1028	-.90	-2.89	-3.35	335	1068	1.69			335	1091	1.33			335
1028	.33	-1.90		657	1068	1.30			423	1091	1.54	-1.44		423
					1068	.		-1.39	657	1091	1.24			657

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1093	.	-1.15		2441000+	1117	1.27			2441000+	1144	1.11			2441000+
1093		-1.30		254	1117	1.22		-2.56	335	1144	.97			335
1094	.60	-.48		335	1118	.97		-2.87	423	1144	1.36			423
1094	.77	-.67		423	1118	1.24			254	1140	1.93			657
1094	.85			657	1120	.78			335	1140	.89			335
1097	1.64			335	1120	-.67	-1.37		423	1149	.	-2.88	-3.76	423
1097	1.69			423	1120	-.79	-1.40		657	1149				657
1098	-.19	-1.32		335	1121	1.55			335	1150	.	-1.17		335
1098	.	-1.01		423	1121	1.77			657	1150	.19			423
1100	1.65			335	1122	.99			33	1152		-.16		423
1100	1.08			548	1122	1.36			423	1152	1.31		-4.12	657
1102				335	1122	1.18			657	1155		-1.22	-2.73	335
1102		-.53	-3.58	657	1123	.91			335	1155				423
1103	1.78			335	1126	1.68			423	1160	1.02			335
1103	1.40		-3.72	423	1126	.	-1.86		335	1160	1.36			423
1104	1.42			335	1126	2.12			548	1160	1.44		-2.38	657
1104	1.85			657	1130	1.36			657	1163	.96			335
1106	.84	.		45	1130	1.42			335	1163	.87			423
1106	.90			132	1133	1.10			423	1166	.	-2.56	.	132
1106	.56			335	1133	1.48			254	1166		-1.56		548
1106	.51			423	1133	1.35			335	1167	1.03			335
1106	.63			548	1133	.		-2.29	423	1167	1.04			423
1106	.60			657	1134	1.59			657	1169	1.44			254
1109	1.70			335	1134	1.04			254	1169	1.25			335
1109	1.30			657	1141	1.49	-1.13		335	1174	1.42			335
1110	-.27			132	1141	.43	-2.06		423	1174	1.56			423
1110	-.01			254	1141	.54	-2.12		657	1175	1.25			335
1110	-.39	-.95		335	1142	2.09			335	1175	1.43			423
1110	-.13			423	1142	1.57			548	1175	1.51			657
1110	.51			657	1143	1.57			335	1176	1.16			335
1114	1.38			335	1143	1.85		-2.61	423	1176				423
1114	1.52			423	1143	1.19			548	1177		-1.12	-2.86	254
1114	1.22	-.77		657	1143				657	1177		-.82		335
1116	.	-2.14		548										
1116		-1.21		657										



MULTIPLY OBSERVED SOURCES

CRL	N(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1178	.89			2441000+	1228	1.63			2441000+	1252	.	-.60		2441000+
1178	1.38			335	1228	1.54			335	1252		-1.11		254
				423					423					335
1183	-1.39	-1.27		335	1229	1.62			335	1255	.40	-.95		254
1183	-1.40	-1.68		423	1229	1.53			423	1255	.82			335
										1255	.60			423
1184	1.53	.51		335	1232	.48			254	1256			-3.13	335
1184	1.40	-.92		423	1232	.35			335	1256			-3.91	423
					1232	.48	-.55		657					
1186	1.20	-.27		335	1232	.92				1257	1.14			254
1186	1.17			423	1238	1.48			254	1262	1.41			335
					1238	1.54			335					
1187	.62			335	1240	1.43			335	1264		-.61		254
1187	.61			423	1240	.63			423	1264		-.14		423
1187	1.39			657						1265	1.33			254
					1241	-1.23	-2.21	-3.23	254	1265	1.27			335
1191	.84	-1.70		335	1241	-1.33	-2.43	-2.69	335	1265	1.53			423
1191	.			423	1241	.	-2.43		423	1267	1.20			132
1199	.	-.66		254	1242		-.84	.	132	1267	.87			548
1199	.87			335	1242	2.06	-.48		548				-2.29	254
										1272	1.46	-1.24		423
1200	.55		-2.82	254	1243	.92			254					
1200	.74			423	1243	.82			423	1276	1.19			254
										1276	1.25			423
1201	.	-.29		254	1244	.02	-.74		254	1277	1.31			254
1201				423	1244	.08	-.96		423	1277	1.24			335
1202	1.48			254	1245	.16			254	1282	1.61			254
1202	1.97			335	1245	.14			335	1282	1.35			423
1205		-2.60	.	132	1246	1.12			254	1283	1.57	-1.52		254
1205	.	-1.63		548	1246	2.01			335	1283	.	-1.49		423
1218	1.30			254	1247	.50			254	1284			-2.75	335
1218	1.03			335	1247	.98	-.77		335	1284			-4.91	423
					1247	.57			423					
1219	.	-.93		254	1249	1.32			335	1285	1.10			254
1219	.	-1.98		657	1249	1.17			423	1285	1.35			335
										1285	1.61			423
1220	.00	-.96		335	1251		-1.03		335					
1220	.16		-2.59	423	1251		-.90		423	1286	1.24	-.83		132
			-3.42	657						1286	1.21			254
1222	.			423										657
1222				657										
1227	1.09			335										
1227	1.13			423										

# MULTIPLY OBSERVED SOURCES

CRL	M(3)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1287	1.63			2441000+	1308	1.47			2441000+	1332	1.23			2441000+
1287	1.78			254	1308	1.48			254	1332	1.40			254
1287	1.65			335	1308	1.46			335	1332	1.23			335
				423					423					423
1288	-1.30	-1.69		254	1310	1.58			254	1335	1.30			254
1288	-1.31	-1.73		423	1310	1.59			335	1335	1.46			423
					1310	1.12			423					
1291	.96			132						1336		-1.91	-2.65	335
1291	.84			335	1314	1.72			254	1336			-2.56	423
1291	.99			423	1314	1.60			335					
1291	.94			548						1337			-2.20	254
					1316	1.05			254	1337			-2.78	423
1294	1.43		-3.42	335	1316	.87			423					
1294				657						1341		-1.96	-2.05	254
1295	1.77			335	1317	1.38			254	1341		-1.50		335
1295	1.55			423	1317	1.12			423	1341		-1.97	-1.36	423
1296	1.12			254						1342				254
1296	1.09			335	1320	1.28			254	1342				423
1296	1.11			423	1320	1.17			335					
					1320	1.34			423	1344		-1.48		254
1298	-1.57	-1.47		254	1321	-1.29	-1.65		254	1344				335
1298	-1.46	-1.11		423	1321		-1.08		423	1344				423
1299	-1.53			254	1323	.39			254					
1299	.69			423	1323	.28	-1.03	-2.76	423	1345		-1.98		335
1301	-1.11	-1.37		254						1345		-1.19		423
1301	.05			423	1324	2.43	-1.28		254	1345				
1302	-1.25	-1.87	-2.85	254	1324		-1.94		423	1346				254
1302	-1.26	-1.39		423						1346				423
1303				548	1325		-1.52		132	1350				254
1303		-1.40	-4.83	657	1325		-1.27		657	1350				335
1304				254	1326	-1.91	-2.62	-2.96		1351				254
1304	.06			335	1326	-1.88	-2.93	-3.90	254	1351				423
1304	.44			423	1326	-2.00	-3.05	-3.09	335	1352		-1.44		254
1304	.08			657					423	1353		-1.41	-1.27	423
1307	.27			254	1328			-3.64	132					
1307	.13			335	1328			-3.93	335	1354				254
1307	-1.02			423						1354				423
					1330		-1.93		548					
					1330		-1.39		657					
					1331		-1.21	-2.99	254	1355				254
					1331		-1.21		423	1355				335
										1355				423
										1357				254
										1357				423

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1358	.29			2441000+	1380	-3.05	-4.23	-5.07	254	1415	1.81			2441000+
1358	.11	-.39		254	1380		-4.18	-5.14	423	1415	1.53			132
				423						1415		-2.88		335
1360	1.56			132	1381	-3.77	<-6.04	<-8.45	254	1415				548
1360	1.74			254	1381	-3.16	<-5.63	-8.25	423	1416	1.23		-3.51	335
1360	1.62			423	1386	.82	-1.44		254	1416		-1.93		548
1361		-1.33		335	1386	.99	-.36		423	1420		-1.52		254
1361		-1.09		423	1387	1.37			254	1420	1.76	-.90		423
1363	.52	-.85		132	1387	.82			423	1422	1.67			132
1363	.52			254					254	1422	2.54			254
1363	.68			335	1388		-.94	-3.26	254	1423	1.24			45
1363	.96			548	1388			-3.21	335	1423	.99	-.98		132
1363	1.06			657	1388		-.76	-3.22	423	1423	1.16			254
1366	1.06	-.51		254	1397	1.53			335	1423	.58	-1.17	-3.27	423
1366	1.37			423	1397	1.50			423					
1368	1.29		-2.86	45	1399	.70			254	1429		-.20	-2.55	45
1368	1.63			335	1399	.45	.03		423	1429		-.57		335
1368		-.59		423						1431	1.47			45
1369	.86			254	1400	1.86			45	1431	1.30	-.96		132
1369	.69	-1.04		423	1400	1.62			335	1431	1.18			254
1371	1.09			254	1401	1.63			254	1431				335
1371	1.72			423	1401	1.54			335	1432	.51	-1.37		132
1372	1.14			254	1402	.95	-.28		45	1432	1.44	-1.11	-3.03	254
1372	.92			423	1402				254	1432	.54			335
1374	1.77	-.24		45	1407			-2.73	45	1433	.26	-.66		45
1374		-1.30		254	1407			-2.60	45	1433	.16			132
1375		-.71		254	1410	-.73			335	1433	.04			254
1375		-.49		423	1410	-1.08	-1.24		254	1433	.17			335
1376	-.95	-2.45	-2.81	254	1411	-.60			45	1435		-.12	-1.89	45
1376	-1.59	-2.90	-3.50	423	1411		-1.53		254	1435		-1.03		254
1377		-.67		254	1412	2.05		-2.57	45	1436	1.54		-2.56	45
1377		-.30		423	1412			-3.05	254	1436		-1.08		132
1378	.13	-.65		254	1413	1.85	-1.13		423	1442	1.60			45
1378	.05			335	1413	1.89			132	1442	1.70			132
					1414		-1.05	-3.29	335	1442	1.97			335
					1414				423					

# MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1443	1.53	-.12		2441000+	1506	1.73			2441000+	1566	.51			2441000+
1443	1.26			45	1506	1.24			45	1566	.80	-.92		45
1443	1.23			335					132					423
1447	.	-1.90		423	1513	1.34			45	1570	-1.15	-1.80		45
1447		-.65		423	1513	1.74			423	1570	.	-2.14	.	132
1448	.55			45	1517			-2.86	45	1571	1.65			45
1448	.48			132	1517		-.88		132	1571	1.62			423
1448	.61			335	1517		-.51		657	1576	-1.51	-1.98		45
1449	1.15			132	1519	1.18	-.84		45	1576	-1.42	-2.07		132
1449	1.40			335	1519		-.98		132	1580	.		-3.03	45
1451			-2.99	45	1523		-.57		45	1580			-2.54	423
1451			-3.38	132	1523		-1.37		132	1581	.81			45
1456	.	-1.57	-2.66	45	1526	1.43			132	1581	.31			423
1456	2.24	-.63		423	1526	1.41			335	1583	-.07	-1.05		45
1459		-.75		423	1535	.08	-1.30		548	1583	.03	-.93		423
1459		-1.11	-3.01	548	1535		-1.04		45	1584	1.27		-2.07	45
1467	2.12			45	1545	.83	-.87		423	1584	.90			132
1467	1.90			335	1545	.94			45	1585	-.40			45
1471	1.59			335	1547	1.21			132	1585	-.31			132
1471	.66			423	1547	1.29			45	1588	-.68	-1.01		45
1472		-1.26		335	1549	-.11	-1.04		423	1588	-.38	-.93		132
1472	.	-1.85		423	1549		-.85		45	1592	2.15	-.12		45
1474	.47	-1.73		45	1550	.96			423	1592	1.54			335
1474	.40	-1.19		132	1550	1.26			45	1602	1.36			45
1474	.49	-1.32	-2.08	335	1552	1.50			132	1602	1.20			423
1474	.12	-.92		423	1552	1.06			45	1606	-2.34	-3.17	-4.00	.
1480		-1.68		423	1552				132	1606	-2.36	-3.14	-4.11	423
1480	1.03		-3.62	548	1555	.01			45	1612	1.64			45
1485		-.71		335	1555	.36			132	1612	1.76			132
1485		-1.56		657	1561	1.63			45	1614	.91			45
1494	-.20			45	1561	1.61			132	1614	.80			423
1494	-.05			132	1565	1.23	-.76		45	1617	1.37			45
1500	1.92			45	1565		-.72		423	1617	1.34	-.26		423
1500	1.50			132										

# MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1621	1.31			2441000+	1655	1.44	-1.19	-2.61	2441000+	1711	1.13	-1.01		2441000+
1621	1.46		-2.91	45	1655				45	1711	1.41			45
1622	1.76			132	1677	.90			132	1714	.73			423
1622	.99			45	1677	1.20			45	1714	.96			45
1627	-3.09	-4.01	-4.33	423	1684	.38			423	1714	.43			423
1627	-3.22	-4.25	-4.67	45	1684	.53			45	1714	.74		-2.90	548
1629		-1.88		423	1685	1.17			423	1715	.76			45
1629		.86		45	1685	.98			45	1715	.74	-2.35	-3.38	423
1633	.15	-1.19		423	1686		-1.21	-3.25	45	1721		-2.18		45
1633	.19	.90		45	1686		-1.60		423	1721		-.85		423
1634		-1.55		45	1687	1.16			45	1740	-1.48	-1.49		35
1634		-1.16		423	1687	1.18			45	1740	-1.49	-1.57		132
1636		-.64		45	1687	1.39			132	1740	-1.70	-1.39		423
1636		-1.66		548	1688	.64			423	1740	-1.39	-1.83	-2.76	548
1637	1.73			45	1688	.64			45	1743	.96			45
1637	1.05			132	1688				423	1743		-1.15		423
1638			-2.75	45	1689	1.23			45	1744	-1.45	-1.47		45
1638				423	1689	1.13			423	1744	-1.27	-1.61		132
1639	1.47			45	1690	.95			45	1745	1.76			132
1639	1.40			423	1690	1.31			132	1745	1.05			423
1648	.54			45	1691	1.50			45	1747	1.78			45
1648	.71			423	1691	1.14			548	1747	1.74			423
1650	-3.84	-5.38	-5.69	45	1694	.28	-.68		45	1749	1.86	-.34		132
1650	-3.63	-5.14	-5.63	423	1694	.28	-.23		423	1749	1.63			423
1653	.78			45	1695	1.67			45	1750	-1.57	-1.75		45
1653	.21	-.58		423	1695	1.86	-.21		423	1750	-1.55	-2.09		423
1656	-.33			45	1696	.30	-1.33		45	1756	.92			132
1656	-.30			423	1696	.21			132	1756	.48			423
1660	1.05		-3.26	45	1697	2.01	-.76		45	1759	1.61			45
1660	.59			132	1697	1.01			423	1759	1.56		-3.80	423
1663	.91			45	1705	1.10			45	1761	.74			45
1663	.95	-.98		423	1705	1.77		-2.32	132	1761	.89			132
					1710	.58	-1.94		423	1761	.52			423
					1710	.35	-.95							

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1765	.86	-.90	.	2441000+	1799	-.15	-.65	.	2441000+	1826	.94	-1.35	.	2441000+
1765	.41	-1.21	.	132	1799	-.34	-.41	.	132	1826	.95			132
				423					423					423
1767	-.86	-1.82	45	1801	-.14	-1.27	.	132	1820	1820	1.27			132
1767	.	-1.64	423	1801	-.32	-1.35	.	423	1820	1820	1.53			423
1769	.08	-1.82	.	132	1802		-.54	.	132	1835	2.04	-.54		45
1769	-.23	-1.26	423	1802		-1.60		423	1835	1835	1.37			132
1772	.81		.	122	1805	1.31		45	1837	1837	-1.27	-2.06	.	132
1772	1.01		423	1805	1.39		-2.01	45	1837	1837	-1.58	-1.80		423
				423	1805	1.36		423						
1773	.66	-1.11	132	1806	2.13			45	1850	1850	.92			132
1773		-1.82	423	1806	1.33			45	1850	1850	.94			423
1774	1.41		.	132	1806	1.44		423	1640	1640	1.64			45
1774	1.66		423	1809	2.08			423	1840	1840	1.81			423
1777	.07		45	1809	1.17			132	1843	1843	1.66			45
1777	.22		423	1810	2.03			45	1843	1843	1.51			132
1777	1.32		132	1810	1.57			132	1643	1643	1.29			423
1777	1.21		423	1810	1.87			423	1647	1647	1.10			45
1780	-.52	-1.76	45	1811	1.33			45	1847	1847	.95			423
1780	-.28	-1.07	132	1811	1.82			132	1851	1851	1.27			45
1780	-.57	-1.45	423	1811	1.78			423	1851	1851	1.17			132
1780	-.30	-2.10	548	1813	1.63		-3.28	45	1854	1854	.45			45
				1813			-3.28	132	1854	1854	.92			132
1783	1.28		45	1814	1.42			45	1859	1859	1.50			45
1783	.94	-4.29	132	1814	1.39			132	1859	1859	.97			132
1783	.82		423	1814	1.48			423	1859	1859	.53			423
1783	.98		548	1818	1.15			45						
1788	-1.30	-1.79	132	1818		-.99		45	1660	1660		-.83	-2.00	45
1788	-1.39	-2.23	423	1818		-.82		423	1660	1660			-2.59	423
1792	.48		45	1819			-1.10	132	1661	1661	.06			45
1792	.96		423	1819			-.67	335	1661	1661	.54			132
1793	-.21	-1.44	.	1820	1.46			132	1661	1661	.44	-.86	-2.56	423
1793	-.22		423	1820		-.86		423	1660	1660	-.47	-1.28		45
1796	1.17		45	1825	.07	-.39		423	1660	1660	-.39	-1.72		423
1796	1.70		423	1825	.84			132	1660	1660	-.44	-1.44		548
1798			45					423						
1798		-2.62	45					423	1669	1669	.52	-2.90		45
1798		-3.85	423						1669	1669	.69	-.99		132

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1871	1.88	-.64	.	2441000+	1922	-.10	-3.51	-4.33	2441000+	1960	.79			2441000+
1871	1.50		.	132	1922	.74	-3.25	.	45	1960	.64			45
1874	1.54	-.54	.	548	1923	.11	-.98	.	132	1960	.74	-.24		548
1874	1.13	-.82	.	45	1923	.75		.	45	1970	-.62	-1.58		45
1875	.93		.	423	1924	.		.	132	1970	-.45	-1.44		132
1875	1.28		.	45	1924	.	-1.09	-3.63	132	1971	-.35	-.97		45
1876	.82	-.93	.	132	1924	.	-1.59		548	1971	-.23	-.60		132
1876	1.24	-1.14	.	45	1926		-.85		423	1972	1.27			45
1880	.57		.	132	1926		-1.18		548	1972	.70	-1.49		132
1880	1.22		.	45	1930	.03			45	1974	1.42			45
1881	1.69		.	132	1930	.23	-.91		423	1974	1.04			132
1881	1.60		.	45	1930	1.05	-.80		548	1979	1.70			45
1882	1.58		.	132	1933	1.10			45	1979	1.35			132
1882	1.46		.	45	1933	1.67	-.99	.	132	1981	1.53			45
1887	.24		.	132	1934	-.25	-1.94		45	1981	1.44			132
1887	.	-.63	.	423	1934	-.05	-1.13		132	1982	1.40			45
1890	.10	-1.07	.	45	1939	1.56			45	1982	1.14			132
1890	.35		.	132	1939	1.83			132	1983	1.38			45
1895	.84		.	45	1941	1.08		-3.91	45	1983	.94	-2.32		132
1895	1.11		.	132	1941	1.27			423	1985	1.18	-1.20		45
1896			.	45	1942	1.25			423	1985	.74			132
1896		-.33	.	45	1942	1.28			548	1990	1.46			45
1899		-.01	.	423	1945	.96	-.49		45	1990	1.31			132
1899	1.51		.	548	1945	1.37			132	1991	1.51			45
1904	.	-1.88	-2.56	45	1946	1.39			45	1991	1.43			132
1904	1.07		-3.79	548	1946	1.69		.	132	1993	.46	-1.16		45
1904	.76	-.87	.	45	1959	1.52		.	45	1993	.	-.57	-2.32	423
1904	1.49		.	132	1959	1.17		.	132	1993	.69			548
1907		-.88	.	132	1960	1.31	-.76		45	1994	.	-.56		423
1907		-.93	.	423	1960	1.73		.	132	1994	.	-.52		548
1908	.15	-1.26	.	45	1964	1.24		.	45	1995	.65			45
1908	.21	-.89	.	132	1964	1.38		.	132	1995	.91			132
1916	.94		.	45	1965	1.39		.	45					
1916	1.37		.	132	1965	1.22		.	132					

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
1998	.94			2441000+	2020	-.06	-.91	-2.02	2441000+	2041	-.20	-.78		2441000+
1998	1.34		.	45	2020	-.14		.	45	2041	-.09	-1.65		423
				132					132					548
1999	1.48			45	2021		-1.07		45	2042	.73		.	45
1999	1.11			423	2021		-.68		423	2042	.90		.	132
2002		-1.65	-3.60	45	2023	1.25	-1.93	-3.35	45	2046	1.70	-2.51	-4.75	45
2002	1.05	-2.46	.	132	2023		-1.92	.	132	2046	1.33		.	132
2003	1.21	-3.86	-6.61	45	2024	.81	-1.60	-2.83	45					132
2003	.29	-3.90	-4.86	132	2024	.62	-2.21	-3.38	132	2047	1.15	-2.59	.	45
2004	1.25			45	2026	1.05			45	2047	1.63	-.47	.	132
2004	.81		.	132	2026	.97		-3.22	45					45
2006		-1.81	-4.64	45	2026	.91			548	2048	-.48	-2.54	-2.53	45
2006	1.09	-2.26	-4.58	132	2027	1.39			45	2048	-.57	-2.70	-2.68	132
2008	.69		.	15	2027	1.40	-.57		45	2049		-.30	.	45
2008	.89		.	132	2029	1.40			45	2049	.	-1.42	.	132
2009		-1.31	-2.60	45	2029	1.22		.	132	2050		-1.96	-3.44	45
2009			-3.69	132	2030		-.56		45	2050		-1.28	.	132
2011		-1.46	-4.20	45	2030		-.49		548	2051		-1.08	-3.98	45
2011		-1.50		132	2031	1.88		.	45	2051		-1.16	.	132
2012	1.22		.	45	2031	1.49			132	2052		-3.11	-6.31	45
2012	1.63		.	132	2032	1.32			45	2052		-3.63	.	132
2013	1.12		.	45	2032		-.40		45	2053	1.16	-1.54	.	45
2013	1.45	-.86	.	132	2034	1.78			423	2053			.	132
2015	1.80		-3.32	45	2034	1.37		.	45	2054	-.15	-3.08	-3.82	45
2015	2.18	-1.52	-2.63	132	2035		-.81		132	2054	.11	-2.80	-3.63	132
2016	.38	-2.39	-3.20	45	2035		-1.13		45	2055	1.37			45
2016	.54	-2.20	.	132	2036	1.08	-.65	.	423	2055	1.49			132
2017	.53	-2.11	.	45	2036	1.13	-.74	.	45	2059	1.36	-1.38	-3.20	45
2017	.62	-2.02	.	132	2039	-1.65	-1.68		132	2059		-1.33	.	132
2018	1.71	-.25	-2.28	45	2039	-1.61	-1.72		45	2062	2.01	-1.27	-3.27	45
2018	1.55		.	132	2039	-1.57	-1.79		548	2062	1.02	-1.70	.	132
2019	.18	-2.28	.	45	2040	-.46	-2.17		45	2065	.31	-1.14		45
2019	.77	-2.11	.	132	2040	-.74	-2.41	-2.33	423	2065	.74	-.95		132
			.		2040	.24	-1.98		548					



MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2066	1.29		-2.43	2441000+	2092	1.70			2441000+	2122	1.28	-1.25		2441000+
2066	1.55			45	2092	1.17	-1.59	-3.17	45	2122	.52	-1.46		45
				132					132					132
2067	.39	-1.83		45	2094		-1.36	-3.79	45	2123				45
2067	.07	-2.15		132	2094		-1.74		132	2123	.99	-.45		132
2068	1.06			45	2096	1.84	-1.38		45	2124	.59	<-5.25	-8.24	45
2068	.97			423	2096		-1.80		132	2124	-.24	<-5.79	<-7.99	132
2068	1.55			548										
2071	-1.96	-4.87	-5.78	45	2097	.56	-.90		45	2125	1.26			45
2071	-1.80	-4.93		132	2097	1.24	-.66		423	2125	1.41			132
2072	.55			423	2102	.87	-1.69	-3.18	45	2127	.89	-.75		45
2072	1.13			548	2102	.69	-1.38		132	2127	.80	-1.45		132
2073	1.53	-1.17		45	2103	.38	-2.36	-2.99	45	2128	.62	-.74		45
2073	1.56			132	2103	.16	-2.34		132	2128	.74			423
2074				45	2104	1.04	-1.04	-3.20	45	2129	.80			45
2074		-.98		132	2104	1.03	-1.49		132	2129	1.06			423
2077	.46	-1.19		423	2107		-1.05	-3.83	45	2131	-.37			45
2077	.71			548	2107		-.52		132	2131	-.28			132
2078		-3.38	-6.28	45	2109		-1.20	-2.29	45	2132	1.70	-2.21	-4.30	45
2078		-3.24	-6.11	132	2109		-.96		132	2132		-1.68	-4.33	132
2080		-1.42		45	2110		-1.51		45	2133	.16	-1.28		45
2080		-1.39		132	2110	1.73	-1.71		132	2133	.12	-.57		423
2082	1.13			45	2113		-1.97	-3.36	45	2133	.28			548
2082	1.30			132	2113		-2.30	-4.26	132	2134	.75			45
2083	1.16	-1.40		45	2114	.99			45	2134	1.02			132
2083	1.18	-1.15	-2.95	132	2114	1.06			132	2136		-.82	-3.68	45
2084	1.40			45	2115	.80			45	2136		-1.29		132
2084	1.91			132	2115	.86			132	2137	.88			45
2085	1.54	-.92		45	2116	-.33	-.41		45	2137	.91			423
2085	.85	-1.21		132	2116	.01	-1.07		45	2138	.35			45
2087	.84			45	2117		-2.35	-5.40	45	2138	.37			423
2087	1.05	-.85		132	2117		-1.45		132	2138	.47			548
2090		-2.15	-5.43	45	2120		-1.18	-2.48	45	2139	.11	-2.82	-3.33	45
2090		-2.68		132	2120		-1.04	-3.32	132	2139	.25	-2.95		132

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2140			-2.45	2441000+	2165	.79	-2.04	-3.14	2441000+	2187	.53	-1.29		2441000+
2140			-2.43	45	2165	.75	-2.31	.	45	2187	.35			45
				548					132	2187	.42	-1.59		548
2141	1.72			45	2166	1.18	-1.07		45	2188		-1.15		45
2141	1.32			132	2166		-.98		132			.55		132
2143		-1.30		45	2167	.56			45	2192	1.39			45
2143	1.66	-1.45	-3.31	132	2167	.73		.	132	2192	1.29	-1.65		132
2144	1.60			423	2168		-.92	-2.61	45	2196	.70			45
2144	1.76			548	2168	1.26	-1.26	.	132	2196	.71		-3.59	132
2145	.58			45	2169		-2.27	-3.29	45	2190	1.05			45
2145	1.26	-1.65		423	2169			-4.20	132	2190	1.33			423
2146		-1.07		423	2171	1.58		-3.08	45	2201	1.90			45
2146		-1.69		548	2171	1.45	-.86		335	2201	.99			132
2147	2.04	-2.28	-4.25	45	2171		-1.44		548	2203	.89	-1.19	-2.97	45
2147		-2.42	-2.87	132	2171		-1.32		657	2203	1.14	-1.10	-3.03	132
2148	1.25			45	2174	1.43	-1.22	-2.96	45	2204	.42			45
2148	1.15	.06		423	2174				132	2204	.50			132
2148	1.00			548	2175		-.39		45	2205		-1.75	-4.02	45
2151	.79	-1.41		45	2175		-1.30		423	2205		-1.06	-3.80	132
2151	.41			132	2177	2.03	-2.55	-5.58	45	2206	.26			45
2152		-1.68		45	2177	1.34	-3.07	-5.50	132	2206	.25			423
2152		-1.44		132	2178	.39	-2.38		45	2208	.42			548
2154	.56	-2.10	-2.76	45	2178	.91	-2.40		132	2209	1.57			45
2154	.75	-1.71		132	2181	1.28			45	2209	1.56			132
2155		-2.52	-2.11	45	2181	1.13	-1.16		423	2210		-2.97	-6.08	45
2155	1.19	-2.71	-3.73	423	2181			.	548	2210		-2.78		132
2157		-1.56	-2.95	45	2182	1.04			45	2211	1.78	-.66		45
2157				132	2182	.84			132	2211	1.74	-1.07		132
2161		-1.35	-3.78	45	2184	1.54			335	2212	1.16			45
2161		-.53	-3.62	132	2184	1.18			423	2212	1.34			548
2162	-.03	-2.38	-2.99	45	2185	1.53	-.77		45	2217	.43	-.96		45
2162	.02	-2.11		132	2185		-1.48		132	2217		-1.25		423
2164	.94	-.59		45	2186	1.01	-1.13		45	2217	.67	-1.17		548
2164	1.22	-1.22		132	2186	1.39			132					

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2220	1.65			2441000+	2246		.65		2441000+	2274	.10	-.07		2441000+
2220	1.27			45	2246	1.07	-1.35		45	2274	.41	-.99		45
2223	.71	-2.28	-2.93	132	2247	1.28			548	2274	.22			548
2223	.81	-1.31		45	2247	1.88			423	2275	.14			45
2225	1.18			132	2247	1.88			548	2275	.02	-.83		132
2225	1.23	-.91		45	2248	1.03			45	2277		-.72		45
2226				548	2248	1.11	-.85		132	2277			-3.09	548
2226		-1.28		45	2250	1.46			45	2270	-1.50	-1.87	-2.14	45
2226		-1.06		132	2250	1.85			132	2270	-1.38	-1.79		423
2227	.93	-2.20	-3.57	45	2251	1.36	-3.28	-6.27	45	2270	-1.50	-1.84		548
2227	.46	-2.13	-3.75	132	2251	2.20	-2.70	-5.55	132	2270				548
2228	1.48			423	2252		-1.41		45	2279	1.38			45
2228	1.51			548	2252	1.50	-1.39		132	2279	1.43			423
2229	1.55	-1.54		45	2254	1.77	-.27		45	2281	1.82			45
2229		-.92		132	2254	1.27			132	2281	1.66			132
2230	1.22			45	2257		.63		45	2282	.56	-.58		45
2230	1.18			132	2257		.63		132	2282	.27			132
2231	1.55			45	2260	-.00	-1.25		45	2283		-.26		45
2231	1.58			548	2260	.13	-1.16		132	2283		-1.67		423
2233	-.86	-3.32	-3.38	45	2261	.29			45	2285	-2.26	-2.15	-1.88	45
2233	-.88	-3.29	-3.64	132	2261	.56	-1.45		423	2285	2.32	-2.31	-2.84	423
2235	-.14			45	2261	.57			548	2285	-2.38	-2.46		548
2235	-.59	-1.58		132	2262	1.62				2291	1.13			45
2236	.46	-1.72		423	2262	2.13			45	2291		-2.15		548
2236	.31	-1.47		548	2263	1.65			132	2294	1.57			45
2237	1.49			45	2263	1.75			45	2294	1.75			548
2237	1.53			132	2267	1.33			548	2300	.94			45
2240	.86			45	2267	1.24			45	2300	.84			132
2240	.91	-.98		423	2268	1.02			132	2301	.90			45
2240	1.00			548	2268	1.17			45	2301	.79			423
2242		-.46	-3.37	45	2269	1.50			132	2301	.78			548
2242		-2.89		548	2269	1.43			45	2302	.89			45
2243		-1.03	-3.76	45	2273	1.88			548	2302	1.25			132
2243		-4.20		132	2273	1.62			423	2307		-1.82		45
									548	2307		-2.36		548

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2308	1.70			2441000+	2341		-2.2	-5.07	45	2364	1.75			2441000+
2308	1.61			45	2341		-2.46	-5.30	548	2364	1.54			45
2312	1.28			45	2342	1.55	-.27		45	2365	1.62			45
2312	1.14			548	2342	1.37	-.47		548	2365	1.54			548
2314	-.89	-1.54		45	2345		-1.74	-4.74	45	2366	.09	-.86		45
2314	-.76	-1.62		132	2345		-2.20	-3.75	548	2366	.12	-.56		548
2317	1.63			45	2346	.88			45	2367	1.20			45
2317	.91			423	2346	1.35			423	2367	.86			548
2317	1.22			548	2346	1.31			548	2367				548
2319	.45	-.50		45	2347		-1.13		45	2368	-.89	-3.19	-3.60	45
2319	.35	-.94		548	2347		-.66		132	2368	-.68	-3.01		132
2320		-.42		45	2348	.95			45	2371		-1.10	-3.36	45
2320		-.60		423	2348	.45			423	2371		-.93	-3.51	548
2322	1.61			45	2348	.88			548	2372	1.57			45
2322	1.73			548	2349	-1.55	-3.96	-4.52	45	2372	1.70			423
2324		-2.01	-2.93	45	2349	-1.62	-3.92		132	2372	1.73			548
2324	-1.43	-2.69	-3.35	548	2350	.67	-2.10	-3.25	45	2374		-.98	-2.52	45
2326	.31		-2.92	45	2350	.88	-2.90	-3.12	548	2374		-1.83		548
2326	.37		-2.92	548	2351	1.53			45	2375	-.68	-1.34		45
2331	.40			45	2351	1.28			548	2375	.88	-1.66		548
2331	.48			423	2355			-2.65	45	2376	1.93	-1.15	-4.83	45
2331	.35	-.76		548	2355			-3.09	423	2376	.99	-2.58	-5.46	548
2332		-.74		423	2356	1.36			423	2377		-.15		45
2332		-1.27		548	2356	1.80	-.93		548	2377		-.89		548
2334	1.70	-2.59	-5.57	45	2357	1.37			45	2379		-1.86	-4.08	45
2334		-2.62	-5.65	548	2357		-.62		423	2379		-2.05		548
2337		-.82		45	2357			-3.30	423	2380		-1.43	-2.68	45
2337		-1.30		548	2357	1.62			548	2380			-3.35	548
2338	.72			45	2358		-.48		45	2381		-3.10	-6.58	45
2338	.58			423	2358	.77			548	2381	1.62	-3.74	-7.05	548
2338	.60	-1.29		548	2359		-.89	-3.00	45	2383	-1.28	-2.64	-3.01	45
2339	1.57			45	2359			-3.05	548	2383	-1.51	-2.73	-3.18	423
2339	1.56			548	2360	1.24		-2.40	45	2383		-2.87	-3.89	548

## MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2384	.02			2441000+	2406	.05	.19		2406	2428	1.11	-.87		2441000+
2384	-.22	-.74		45	2406	.11	.69		2406	2428	1.03	-.91		45
2384	-.30			423										548
2384	.18			548	2407	-.20	.66			2429	1.06			45
				657	2407	.	-1.24			2429	1.26			423
2385		.15		45						2429	1.40			548
2385		-1.54		423	2408		.42	-2.52	45					132
2385	.	.03		423	2408		-.07	-3.34	548	2430	.69			548
2386	1.48			45	2409	.65			423	2430	.99			45
2386	2.01		-2.73	423	2409	.31	-1.38		548					548
2387	1.91			45	2413					2432	1.05			45
2387	1.65			548	2413		-1.51	-2.37	45	2432	1.03			548
2388	1.67			45					548	2433	1.88	-1.96		423
2388	1.72			423	2414	.57			548	2433	1.48		-1.88	548
2388	1.44			548	2414	.41			45	2435	1.12			45
2389	1.44			45	2415	.30			548	2435	1.50			423
2389	1.76			423	2415	.28			45					45
2389	1.23			548	2417	.08	-2.58		548	2436	1.82	-.22		548
2390	.27	-4.48	-6.27	45	2417	.70	-3.35	-2.94	45	2436		-.89		45
2390	.05	-4.46	-6.31	548	2418	.35			548	2439	.20			45
2395	.29			45	2418	.27			45	2439	.22			423
2395	.22	.02		548	2418	.57			548	2439	.10	-.87		548
2396	.92	.28		45	2419		-1.15		423	2440	1.43	-1.64		45
2396	1.44	-1.43	-6.27	423	2419		-1.19		657	2440	1.02	-1.94		548
2396		.24		548	2420	1.52			45					45
2398	1.41		-3.63	45	2420	1.06			548	2442		-3.38	-3.74	423
2398	.88			548	2422	1.06	-1.13		45	2442				548
2400	.92	-1.34		45	2422	.64	-1.53	-2.58	423	2443	1.33	-1.23		45
2400	.26	-1.02		132	2423	.19	-1.27		45	2443	1.06	-.68		548
2400	.57			548	2423	.63	-1.88		548	2445	1.35	-2.02	-3.27	45
2402	.83			45	2424	.60			45	2445		-1.33		548
2402	.30			132	2424	.43			45	2446	.49			45
2402	.47	-3.13		548	2424	.50			548	2446	.70			548
2404	1.38			45	2426	.12			45	2446				45
2404	1.15			423	2426	.45			45	2448		-.44		45
2404	1.25			548		.32			548	2448		-1.23		548
									657	2449		-1.64		423
									45	2449		-1.47	-4.23	657

## MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2450	1.18			2441000+	2466	.35			2441000+	2488	1.74	-.66		2441000+
2450	1.13			45	2466	.24	.54		45	2488		-1.00		45
2451	1.69			423	2466				548	2488				548
2451	1.38			45	2467	.51			45	2490	.21	-.28		45
2451				548	2467	.36			548	2490	.15			423
2452	1.10			45	2470	1.96	.11		45	2490	-.03			548
2452	.85			548	2470		-1.46		548	2491	1.41			45
2453	-.79	.99		45	2471	-.82	-1.95		45	2491	1.49			548
2453		.85		548	2471		-2.20	-3.78	548	2493	1.00			45
2454				45	2472	1.25			45	2493	1.01			548
2454				548	2472	1.15			423	2494	1.05	-2.43	-3.12	45
2455				45	2472		.34		548	2494	.44	-2.75	-3.62	548
2455				548	2473	1.84			45	2495				45
2456	-.93	.19		45	2473	1.48			548	2495	1.63	-2.41	-5.45	45
2456	-1.19	.98		548	2476	1.02			45	2495		-2.91	-5.54	548
2458	1.77			45	2476	.98			423	2496	1.46			45
2458	.67			548	2476	.55	.37		548	2496	1.43			335
2459	1.57			423	2476	1.61			657	2496			-2.37	657
2459	1.47			548	2477				45	2497	.75			45
2460				45	2477		-1.14	-2.84	45	2497	.93			423
2460				548	2477		-1.28		548	2497	.67			548
2461	-.82	.16		132	2479	-.63	-2.44		132	2497	.75			657
2461	-.55	-2.88	-3.45	548	2479	-.55	-2.67		548	2490		-.41		45
2462	1.05	-1.59		45	2480	.95			45	2490		-1.45		548
2462		-1.45		548	2480	.62			423	2499	1.64			45
2463	.39			45	2480	.56			548	2499	1.52			548
2463	.00			548	2481	1.55			132	2500				45
2464	1.30			45	2481	.97	-2.96		548	2500	1.02	-1.64		548
2464	.84			423	2482	1.39			45	2501		-1.99		45
2464	1.01			548	2482	1.36			548	2501	1.35			423
2464	1.62			657	2484	1.10			45	2501	1.74		-3.63	548
2465	-2.92	-3.87	-4.51	45	2484	1.01			548	2501	1.37			548
2465	-2.77	-3.69	-4.35	548	2485	-.41			45	2502	1.08			45
					2485	-.40	-1.32		548	2502	1.22			548
					2486	.17			45	2503	.49	-.80		45
					2486	-.07	-1.02		548	2503	.18			548

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2504	1.09			2441000+	2525		.64		2441000+	2551	2.16			2441000+
2504	.91			45	2525		.77		45	2551	.90	.51		45
				548					548					657
2505	1.57			45	2526	.03	-1.09	-2.87	45	2553	1.80	-1.59		45
2505	.80			548	2526	-.10			423	2553				548
					2526	.51	-1.08		548					
2506	*	.91		45	2526	-.07	-1.32		657	2554	1.68	-1.01	-4.28	45
2506	1.51			423						2554		-1.48	-4.08	548
2506	1.57			548	2528	.58			45					
					2528	.65			548					
2507	1.38			45						2555	.80			132
2507	.82			548	2531	.23	-.57		45	2555	.84			548
					2531	.08			548					
2509	*		-2.77	423	2531	.40			657	2556	.63	-.91		45
2509			-2.70	548						2556	.48	-1.02		548
					2535	.62			45	2556	.33	-1.10		657
2510	*	.67		548	2535	.29			423					45
2510		-1.34	-4.44	657	2535	.02	.95		548	2557		-1.06		45
					2535	.58			657	2557		-1.57		657
2512	*	.60		423						2558	1.00	-.25		45
2512	1.43			548	2538	1.35			45	2558	1.39			548
2512	1.62			657	2538	1.32			548					
2513	.12	-2.36	-3.26	45	2539	1.72			45	2559	.22	-2.32	-3.32	45
2513	.55	-2.01	-3.34	548	2539	1.70			548	2559	.01	-2.32	-3.53	548
2514	.11	-3.12	*	132	2540	-.10			45	2560	-.19	-2.91	-5.15	45
2514	-1.25	-4.10	-5.41	548	2540	.07			657	2560	-.37	-3.29	-5.05	548
2515	.55		*	132	2543	1.44			548	2561	.54			45
2515	.16			548	2543	1.88			657	2561	.41			548
										2561	.47			657
2516	1.25	-.90		45	2545		-.69		45	2562	.10	-1.01		45
2516	1.06			423	2545	1.74	-.13		548	2562	*	.25		423
2516	1.45			657						2562	.96	-.92		548
					2547	.74			45	2562	.33			657
2517	1.12			45	2547	.68			548					
2517	1.33			348	2548	1.94			45	2564		-1.18	-3.69	45
		-2.00	-3.37	132	2548	1.65			548	2564		-.63		548
2518				548										
2518					2549		-1.49	-2.81	45	2565	.65	-.81	-3.65	45
					2549		-1.17		548	2565	.26	-2.50	-3.59	548
2520	.81		*	132						2565	.34	-1.26	-3.78	657
2520	.66			548	2550	.61	-1.65		45					
					2550	.23	-1.70		548	2566	1.40			423
2523	1.69		*	132						2566	1.48			548
2523	1.07			548										

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2567	1.61			2441000+	2585	1.10			2441000+	2602		-2.34	-4.25	2441000+
2567	1.80	-.78		132	2585	1.15			45	2602		-2.15	-4.90	45
2569	1.54			548	2585	1.46			548	2602		-2.30	-4.12	548
2569				45					657					657
2569	1.68			423	2586		-2.09	-3.78	45	2603	1.45	-1.96		45
2570	1.80		-3.77	657	2586		-1.62	-2.41	548	2603		-1.68		548
2570	1.76			45	2586				657	2603			-4.52	657
2570	.92			423	2587		-1.95		423	2604	1.53	-1.29		45
2570	.82			548	2587		-1.95		548	2604	1.19	-1.35		548
2575	-.39	-2.85	-3.84	657	2590	-.06	-2.24	-3.28	45	2605	.86	-1.47		45
2575	-.43	-2.39	-3.88	45	2590	-.12	-2.60	-3.63	548	2605	-.02	-2.02		548
2575		-2.58		548	2590	.06	-2.36	-3.60	657	2605	.24			657
2577	1.33			657	2591	.64	-2.60	-4.98	45	2606	1.29			548
2577	.94			132	2591	.42	-2.93	-4.72	548	2606	1.05			657
2578				548	2591		-2.33	-2.75	657					
2578		-1.35	-3.92	548	2592	1.11	-.91		132	2607	1.14	-.43		45
2579		-1.87	-3.17	657	2592	.45	-.24		548	2607	.72			548
2579		-1.37	-1.66	45	2593		-1.23	-4.16	45	2607	1.32	-.67		657
2579		-1.19		548	2593		-1.48	-3.95	548					
2579		-.92	-3.16	657	2594		-.48		45	2608	.61			45
2580	1.09			45	2594		-3.22		548	2608	.46			548
2580	1.22			548					657	2608	.36			657
2580	1.12			657	2596	1.83			45	2609	.26	-1.41	-2.57	45
2581	.09	-1.66		45	2596	1.31			45	2609		-2.54		548
2581	.04	-1.11		335	2596	1.50			548	2609	.27	-1.42		657
2581	-.13	-1.34		423	2596				657					
2581	-.24	-1.11		657	2597	.90			45	2610	1.00			132
					2597	.91			548	2610	1.00			548
2582	1.29			423	2598	1.08			45	2611			-2.76	423
2582	1.40			548	2598	1.29			548	2611			-4.09	657
2583	1.25	-.63		45	2599	1.59			548	2612		-1.19	-3.40	548
2583	1.12			548	2599	2.02			657	2612		-.87		657
2583	1.09			657	2599				45	2613	1.07			45
					2600	1.51		-2.44	423	2613	1.01	-.32		548
2584	1.60	-2.63	-5.51	45	2600	1.35		-2.50	657	2613	1.40	-.82		657
2584		-2.40	-5.95	548	2601	1.78		-2.91	45	2614	.93			132
2584		-2.59	-3.95	657	2601	.98		-2.84	657	2614	.52			548
					2601		-.77	-2.41	45	2615				45
					2601	.93			548	2615			-2.63	548
									657				-2.91	548



MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2616		-1.66	-3.68	2441000+	2632	-1.59	-3.52	-2.95	2441000+	2650	-2.02	-5.26	-6.38	2441000+
2616		-1.05		45	2632	-2.13	-3.96		45	2650	-2.34	-5.58		45
2617	1.38			657	2632	-1.57	-3.42		548	2650	-2.44	-5.14	-7.02	548
2617	.92	-1.20		45	2633	.67	-.66		657	2652	-.17			657
2617	1.12	-1.27		548	2633	.47			548	2652	-.57	-1.19		132
2620		-1.10		657	2634		-.60		548	2653		-2.50		548
2620		-.97		45	2634		-.61		45	2653	1.33			657
2620	1.87	-1.49		548	2635	3.13	-.90		45	2655	1.09			548
2621		-1.40	-4.01	45	2635	1.82			657	2655	.88			45
2621		-.87	-4.45	548	2636				45	2655	.53			423
2622		-.77	-3.65	335	2636			-3.57	45	2655	.92		-2.63	548
2622	1.68			548	2637	.53		-3.68	548	2656			-2.39	657
2622	1.80			657	2637	.19			45	2656	1.53		-4.58	657
2623	.68			132	2637	.62			548	2657	1.13	-.61		548
2623	.45			548	2640				657	2657	1.20			657
2624		-.70	-4.46	45	2640	1.41			45	2658				132
2624		-1.52	-4.39	548	2640	1.62			132	2658	.10	-1.24		548
2625		-1.46	-4.69	45	2642	1.87			335		-.21	-1.63		
2625		-1.90	-4.45	548	2642	1.26			45	2660	.66	-.77		548
2625		-1.14	-3.94	657	2644	.75			548	2660	1.14			657
2626	.84			548	2644			-2.05	45	2662	.97	-.49		132
2626	1.29			657	2644	.55			423	2662	1.11			548
2627	1.42			45	2644		-1.13	-2.14	548	2663	1.00			45
2627	1.32			423	2645	.72			657	2663	.47			548
2627	1.34			548	2645	.85			132	2666	1.27			132
2628		-1.81		45	2646	-.14	-2.14		548	2666	.95			548
2628		-1.05		657	2646	-.01	-1.89		132	2667	.59	-1.07		45
2629	1.45	-.65		132	2647		-.149	-3.36	548	2667	.29	-1.13		548
2629	1.45			548	2647		-1.45		45	2667	.10	-.97		657
2630		-.90		132	2649	1.58			548	2668	1.56			45
2630		-1.02		548	2649	1.10			45	2668	1.33			335
2631		-1.56	-2.53	45	2649	.81			423	2668	.92			657
2631		-1.08	-3.52	548	2649	.97			548	2671	2.60		-2.62	335
2631				657					657	2671	1.94			423



MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2743	.95	-.84		2441000+	2765	1.20	-1.71		45	2782	.08			2441000+
2743	.90			548	2765	1.31	-1.14		335	2782	-.04	-.65		132
				657	2765	.85	-1.10		657					548
2745	1.66			45	2765					2785	-1.10	-2.61	-3.49	45
2745	1.49			335	2766		-.94	-2.26	45	2785	-1.26	-2.70		132
2745	1.52			548	2766		-2.58		548	2785	-1.91	-3.25	-3.14	335
2745	1.68			657	2767	.53			657	2785	-1.87	-3.28	-2.83	423
					2767	.74				2785	-1.47	-2.58		548
2746	1.08			45	2767					2785	-1.56	-2.71		657
2746	.74			423	2768	.62			45	2786			-3.73	45
2746	.99			657	2768	.86			335	2786			-3.34	423
2747	1.28			548	2768	.14	-1.85		335	2787	.23	-.95		132
2747	1.62			657	2768	.89	-1.08		423	2787		-2.57		548
					2769				657	2787	.74			657
2748	.73			45	2769	-.45			548	2790	-.90	-2.35	-3.25	548
2748	.73			423	2769	-.42			657	2790	-.55	-1.68		657
2748	.40			548	2771	1.46	-1.80		45					
2748	.23			657	2771	1.59			335					
					2771	1.29		-2.59	423					
2750	.33			548	2771	.69	-1.40		548					
2750	.12			657	2771	.56	-.92	-3.00	657					
					2771	.56	-.92	-3.00	657					
2751	.91			132	2773				335					
2751	1.31			548	2773		-1.33		423					
2751	1.44			657	2773		-2.02		548					
					2774	1.73			657					
2752	.88			548	2774	1.47			548					
2752	.65			657	2775	-.01	-2.31	-3.37	132					
					2775	-.31	-2.56	-3.41	548					
2754	1.08			548	2775	.77	-2.06		657					
2754	1.28			657	2776	.83			132					
					2776	.61			548					
2757	1.29			45	2777	1.72			657					
2757	.87			132	2777	1.07			335					
2757	1.21			335	2778			-2.83	335					
2757	1.04			423	2778			-3.89	423					
2757	.71			548	2779	-.03	-.97		548					
2757				657	2779	.64			657					
2760				548										
2760				657										
2761	1.30			45										
2761	1.35			335										

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2802	-2.23	-4.32	-4.23	2441000+	2815	1.17			2441000+	2839	.18			2441000+
2802	-2.48	-4.12	-4.93	335	2815	1.86	-.82	-3.75	335	2839	.54			335
2802	-2.24	-4.07	-4.69	548					657	2839	-.25			423
2803	1.44			657	2819	.	-1.46		548	2839	-.34			548
2803	1.49			132	2819	.49			657	2839				657
2804	.79			657	2820	1.31			132	2841	1.77			335
2804	.	-2.35		132	2820	1.39			657	2841	1.00			548
2804	.22			548	2821	-.51			335	2842	.84			335
2805	.01			657	2821	-.46			423	2842	.69			657
2805	-.28	-1.49		45	2821	-.60	-1.14	-4.36	548	2843	1.17			132
2805	-.83	-1.87		132	2821	-.54			657	2843	1.17			548
2805	-.41	-1.81		335	2822	1.15			45	2843	.70			657
2805	-.73	-1.57		423	2822	.54			132	2844	.47			548
2805	-.73	-1.57		548	2822	1.10	-1.00		335	2844	.69			657
2805	-.73	-1.57		657	2822	.			423					
2806	-1.80	-3.19		132	2822	.74	-1.10		548	2845	-1.11	-2.42		132
2806	-1.92	-2.98	-3.90	548	2822	.	-1.02		657	2845	-.96	-2.56		657
2806	-1.99	-3.04	-3.77	657	2825	.44	-1.90		335					
2807	1.73			335	2825	1.46	-1.77		657	2847	1.15			335
2807	1.55			548	2826	1.39			335	2847	.88			548
2807	1.30			657	2826	1.93			657	2847	1.89			657
2808	.91	-2.09		335	2827	.60			335	2848	1.88			335
2808	.42	-1.36		423	2827	1.10			657	2848	1.17			657
2808	.47	-2.02	-3.43	548	2828	-.51	-1.28		132	2851	1.30	-1.14		132
2808	.15	-2.23		657	2828		-1.12		657	2851	.92	-1.46		657
2809	1.66			335	2829	1.30			45	2854	1.60			132
2809		-2.20	-3.05	423	2829	1.65			132	2854	1.43			657
2809	1.74	-.89		548	2829				423	2855	1.75			132
2809				657	2832	.05	-1.50	-2.58	335	2855	1.30			335
2810	1.50			335	2832	.11	-1.29		423	2855	1.12			423
2810	1.50			423	2834	1.64			335	2855	1.42			548
2812	.62	-.78		132	2835	1.46			657	2855	1.43			657
2812	.36	-1.31		657	2835	1.34			335	2856	2.32			335
2813	1.51	-.38		335	2837	-.74	-2.35		657	2856	1.04			657
2813	1.35			657	2837	-.82	-2.02		132					335
2814	1.65			132					657	2857	1.44			548
2814	2.02	-2.45		335					132	2857	1.75	-1.27		548
									657					657

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2859	.51			2441000+	2878	2.01			2441000+	2902	1.42			2441000+
2859	.79			132	2878	*			335	2902	1.80			548
2859	.75			335	2878		-.61		423	2902				657
2859	.92			423	2878	1.81	-.70		548	2904	1.28			132
2860	*			548	2878				657	2904	1.63			335
2860		-2.60		548	2879	1.54			132	2907	1.14			548
2860		-.93		657	2879	1.46		-2.10	548	2907	1.55			657
2862	1.70			132	2880	1.07		*	132	2908	1.41			132
2862	.96			657	2880	.92			657	2908	1.54			657
2864	.27			335	2881	1.54	-1.43		335	2909		-1.43		132
2864	-.32			657	2881	1.25	-.72		657	2909		-1.68	-2.93	423
2865	.90	-1.66	-3.27	335	2884	1.21	-2.20	-4.45	335	2910	1.10			132
2865	*	-1.78		657	2884	*	-2.31	-2.41	423	2910	1.03	-.64		335
2866	.37	-1.57		132	2884	1.27	-1.77	-5.19	548	2910	*	-1.26		657
2866	1.06			657	2884	.73	-2.18	-4.67	657	2912	.78			132
2867	.72			335	2885	.79	-1.94	-4.04	335	2912	1.54			657
2867	.97			423	2885	-.11	-2.51	-3.82	657	2913	-.12			132
2867	.71			548	2887	1.37			335	2913	.02			335
2867	.69			657	2887	.89	-1.02		548	2913	-.13			657
2869	.68	-1.65		132	2887	.73			657	2916	.86			132
2869	.86			657	2889	.27			132	2916	1.07			335
2872	.47		-2.32	335	2889	-.04	-1.10		548	2916		-1.10		657
2872	.36			657	2889	.41	-1.04		657	2918	1.10			132
2873		-1.52	-3.33	132	2891	1.07			335	2918	1.05			335
2873		-1.07		657	2891	1.15			657	2918	.93			657
2874	1.92			132	2893	1.12			548	2919	.60			132
2874	*		-3.16	548	2893	1.43			657	2919	.98	-1.20		335
2875	.64			132	2895	.42			132	2919	.67			657
2875	.83			657	2895	.39			657	2920	1.20			132
2876			-3.41	548	2896	1.68	-1.39		335	2920	1.27			548
2876			-2.89	657	2896	.84	-1.23	-3.61	657	2921	.60			132
2877		-1.10		423	2897	1.81	-1.64		335	2921	.39	-.31		657
2877	*	-1.45		548	2897		-.29		657	2922	.01	-2.17		132
					2901	1.05	-1.72	*	132	2922	1.34	-1.46		335
					2901	.50	-2.58	-2.68	335	2922	1.35	-1.28	-4.04	657
					2901	1.29	-1.90		657					

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2925	1.10			2441000+	2943	1.48			2441000+	2967	.80			2441000+
2925	1.36	-1.52		132	2943	1.20			657	2967	.73			132
2925	1.32			657						2967	1.29			335
2926	.86		-4.68	132	2946	1.61			132	2967	.76	-2.10	-2.92	423
2926	1.76		-2.36	423	2946	1.61			335	2967	.84		-2.63	548
2927			-2.63	335	2948	1.11			657	2968		-1.72	-3.86	657
2927			-2.68	423	2948	1.49			335	2968	1.48	-1.54	-3.35	132
2928	.35			132	2949	.94	-1.84		657	2970		-1.52		335
2928	.30	-1.42		335	2949	1.36			335	2970	1.05			657
2928	.68			657	2949	1.43	-1.03		423					
2929	1.55			132	2950	1.47			335	2971	.86			132
2929	1.65			335	2950	1.85			657	2971	1.41	-1.81		335
2929		-1.87		423	2954				335	2971	1.01	-1.73		548
2931	1.48			335	2954		-1.77		657	2971	1.13	-1.07		657
2931	1.52			657	2957	.96	-1.79		132	2974	1.11	-1.42		548
2932	.99			132	2957		-1.39		335	2974	1.28	-4.03		657
2932	1.41			335	2957	.50	-1.62	-2.39	657	2976	.73			132
2932	1.15			657	2958		-1.26	-3.37	335	2976	.77			335
2935	.49			548	2958		-1.67		657	2977	.38			657
2935	.79			657	2960	.63	-1.98		335	2977	.83	-1.05		548
2936	1.49			132	2960	1.03			657	2977	.32			657
2936	1.71			335	2960	.39			132	2979	1.62			335
2936	1.53			657	2962				335	2979	1.77			657
2937	1.63			335	2962	.10	-1.65		548	2980	1.96			132
2937	1.47			657	2963	.12			657	2980	1.75			335
2938	.57			132	2963			-3.12	132	2982	1.37	-1.16		132
2938	1.02			335	2963			-2.72	335	2982	1.28	-1.03		335
2938	.49			657	2964	1.64		-1.99	657	2982	1.26	-1.32		657
2940	.91			132	2964	1.89			132	2984	1.06	-1.75		132
2940	.73			657	2964	1.52			335	2984	.25	-1.95		657
2941	1.36	-1.40		335	2965	.82	-1.56		657	2985	.65	-1.14		335
2941	1.01			657	2965	.54	-1.10		132	2985	.33			423
2942	.85			548	2965	.79	-1.38		335	2985	1.25			548
2942	.87			657	2966	1.29			657	2985	.76	-1.07		657
					2966	.90			132	2986	.89			132
									657	2986	.35		-4.75	657

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
2987	.93			2441000+	3006	.80			2441000+	3023	-.16	-.145		2441000+
2987	.74	-1.53		132	3006	.63			132	3023		-.135		132
2987	.58	-1.59		335	3006	.55			335					657
				657					657					
2988	.83			45	3007	1.67			335	3024	.62			132
2988	.47			132	3007	.73			657	3024	.57			657
2988	.52	-1.06		335										
2988	.52	-.14		423	3010	.82			132	3025	1.46			548
2988	.32			657	3010	.73			335	3025	1.39			657
					3010	.57			657					
2989	-1.09	-2.34	-3.36	548						3026	1.29			132
2989	-.79	-1.97		657	3011	1.48	-1.22		132	3026	1.54			335
					3011	1.01	-1.28		335	3026	1.46			657
2991		-.65		335	3011	.36	-1.61	-3.33	548	3027	1.78			335
2991		-.72		657	3011	.95			657	3027	1.26			657
2992	.66			132	3012	.56			132	3026		-1.76		335
2992	.81			335	3012	.59			335	3020		-1.15		657
2992	.36	-.24		657	3012	.54	-.89		657					
										3029	-.06			548
2993	1.70			548	3013	.89			132	3029	-.13	-1.56		657
2993	1.78	-1.41	-4.15	657	3013	.92	-.97		335					
					3013	.51			657	3031	-.21	-.96		132
2996	1.32			132						3031	-.88	-.88		657
2996	1.36	-.40		335	3014	1.53			335					
					3014	2.32			657	3032	1.77		-2.43	335
2999		-2.15	-3.52	132						3032		-1.19		423
2999	1.43	-2.07	-3.16	335	3015	1.52			132	3032		-1.83		548
2999	1.54	-1.75		657	3015	1.73			335					
										3034	-.33			132
3000	1.62	-1.10	-3.38	335	3016	1.23			132	3034	-.27	-.62		335
3000		-1.49		657	3016	1.87	-1.43		335	3034	-.44			657
					3016	1.36			657					
3001	1.65			132						3035	1.53			335
3001	1.65	-1.04		657	3017	-2.45	-2.47		132	3035	1.24			657
					3017	-2.28	-2.62		335					
3002		-1.31		335	3017	-2.57	-2.62		657	3037	1.42			132
3002	1.14	-.76		657						3037	1.40			657
					3018	.54	-1.24		132					
3003	1.55	-.40		335	3018	.56			335	3039	.11			132
3003	1.78			657	3018	.47	-.99		657	3039	-.50			657
3004			-2.07	132	3019	1.39			548	3041	.50	-.61		132
3004		-.85	-2.79	335	3019	1.48			657	3041	.55			335
3004		-.99		657						3041	.43			657
					3021		-1.04	-2.74	548					
3005	1.51			548	3021		-4.69		657					
3005	1.25			657										

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
3042	1.50			2441000+	3060	1.92			2441000+	3077	1.70			2441000+
3042	.94			132	3060	1.67			548	3077	1.48			132
3042	1.28			657					657					657
3044	.59	-1.01		132	3061	1.81			132	3078	1.30			132
3044	.24			335	3061	1.61	-1.08		335	3078	1.55			335
3044	.43			657	3063				335	3079				335
					3063				657	3079				657
3045	.92			132										
3045	.54			335	3064	1.13			132	3080	1.83			132
3045	.66			657	3064	1.40			335	3080	1.62			657
3046	1.47			335	3065	.12			132	3081				335
3046	1.37	-2.09		423	3065	.11			335	3081				657
3046	1.41			548	3065	.23			657					
3046	1.84			657						3084	1.87			335
					3066	.79			548	3084	1.68			657
3048				132	3066	1.47			657					
3048	1.61			335						3085	.71			132
3048	1.31			657	3067	1.03			335	3085	.71			335
					3067	1.28			423	3085				657
3051	1.32			132	3068				132					
3051	1.38			335	3068				335					548
3051	.83			657	3068				657					657
3052	1.23			132						3087				132
3052	1.70			657	3070				335	3087	1.47			335
					3070				657	3087	1.05			657
3053				132	3071				548					132
3053				335	3071				657	308C				335
3053				657						308C				657
3054	1.27			548	3073	.51			132					132
3054	1.40			657	3073	.49			335	3091	.64			335
3056	1.18			132	3073	.61			657	3091	.32			657
3056	1.04			335	3074	.77			132					548
3056	1.06			657	3074	.56			335	3092	1.34			657
					3074	.64			657	3092	1.34			548
3057	1.78			132	3075				132					548
3057				335	3075	-1.06			335	3093				657
3057				657	3075				657	3093				657
3058				548	3076				132					132
3058				657	3076	.92			335	3094				335
3059				132					657					335
3059				657						3098				423



MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
3099		-1.79		2441000+	3117	1.81			132	3141	.59	-1.15		2441000+
3099	1.43	-2.11	-3.14	132	3117	1.82			335	3141	.54			335
3099	.92	-1.85		657										657
3100	1.90			132	3122	.91			132	3142		-.51		132
3100	1.98			335	3122	1.40			335	3142		-.71		657
3101	1.99			335	3122	1.19			657					
3101	.93			657	3124	1.34			132	3143	1.17			132
3102	1.56			132	3124	1.37			335	3143	.83	-1.20		335
3102	1.74			335						3145	1.24			132
3103	1.48			335	3125	-.26	-1.64		132	3145	1.29			335
3103	1.62			657	3125	-.49	-1.59	-3.31	335	3147	.91	-2.17		335
3104	1.69			132	3125	-.70	-1.74		657	3147	-1.32	-1.53		657
3104	1.08			335	3126	.62	-1.11		132	3148	.98			132
3107	1.37			335	3126	.68			335	3140	.94	-.82		335
3107	1.19			657	3127	1.07			132	3140	.55			657
3109	.94	-1.85		132	3127	.88			335	3150	1.11			132
3109	.32	-1.91	-2.20	335	3127	.46			423	3150	1.54	-.78		335
3109	.29	-2.05	-4.13	657	3127	.57	-.65		540					
3110	1.55	-1.96		132	3127	.66			657	3151	1.75			132
3110	1.13	-1.28		335	3128	1.69			548	3151	1.45			335
3110		-.77		657	3128	1.27			657	3152	1.43			132
3112	1.33	-.77		132	3132	1.45			132	3152	1.53			335
3112	1.48			335	3132	1.47			657	3153	1.33			132
3112	1.35		-3.73	657	3133	1.36			132	3153	1.10			335
3113	-.22	-.98		132	3133	1.21			335	3154	1.80		-3.52	335
3113	-.46			335	3133	1.19			657	3154			-3.56	423
3114	1.61			132	3135	.47			335	3154			-4.28	548
3114	1.34			335	3135	.33			657	3154		-1.54		657
3115	.74	-1.03		132	3136	.25	-3.51		548			-.98		423
3115	1.03			335	3136	-2.45	-3.96	-4.21	657	3156		-.35		548
3116	.09	-3.17		132	3138	-.02	-2.45		132	3157	1.38	-.70		132
3116		-3.77	-4.76	335	3138	.37	-2.50	-4.19	335	3157				548
3116	-.53	-3.42	-4.03	657	3138	.14	-2.32	-3.68	657	3158	1.30			132
					3139	1.59			132	3158	1.26			657
					3139	1.70			335	3161		-1.56		132
					3140	1.43			132	3161		-.47		335
					3140	1.15	-.79		335					

MULTIPLY OBSERVED SOURCES

CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.	CRL	M(4)	M(11)	M(20)	J.D.
3164	1.61			2441000+	3186	.09			2441000+					
3164	1.41			335	3186	-.23	-.44		132					132
				657					335					335
3165	.89	-2.04	.	132	3187	.70	-1.00	.	132					132
3165	.13	-2.71	-3.62	335	3187	1.26	-.67		335					335
3165	.64	-2.11	-3.27	657										
3166	.91			132	3188	-2.71	-4.20	-5.04	132					132
3166	.19			335	3188	-2.38	-4.36	-4.41	335					335
					3188	-2.64	-4.18	-4.00	657					657
3167	1.17			548	3189	-.92	-2.88	-4.06	548					548
3167	1.56			657	3189	-.40	-2.03		657					657
3168	1.69			335	3191			-2.73	335					335
3168	1.25	-1.39		657	3191			-4.56	657					657
3170	1.38			132	3193		-.80	.	132					132
3170	1.55			335	3193		-1.13	-1.71	335					335
3173	1.47		.	132	3194	.88			132					132
3173	1.81			335	3194	.60	-.22		335					335
3173	1.79			657										
3174	.00			335	3196	.26			335					335
3174	-.39			657	3196	.11	-.93		657					657
3175	1.56		.	132										
3175	1.87			335										
3175	1.59			657										
3176	-.01	-1.31	.	132										
3176	-.12	-1.25		335										
3179	.		-2.71	335										
3179	.		-3.45	657										
3180	1.34			132										
3180	1.10			335										
3181	.	-.98		335										
3181	.	-1.33		423										
3183	1.46		.	132										
3183	1.34			335										
3184	1.50		.	132										
3184	1.65			335										

2441000+

2441000+

## **Part III - Remarks**

### **1. REMARKS**

This section lists remarks pertinent to various CRL sources. For the most part, they consist of secondary associations with the references previously listed. This section also lists all the secondary associations between the CRL sources and the Ohio State Radio Catalog edition 36. The OSU catalog and the following references to the prefixes are from Dixon, R. S. .<sup>26</sup>

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## REMARKS

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 OJ+466  
 4C+06.33  
 4C+70.07.NB70.09  
 N 82.4C+69.12.DA277.4CP69.12.NRA0341  
 CIT 6.82 1012+30  
 4C+64.12  
 MH 1225-03

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1625 OP+543.4CP55.26  
 1659 PK51352+16.OP+187  
 1773 CIT 7.0R+142  
 1777 AC+03.34  
 1832 CIT 8  
 1845 SHARP. 9  
 1855 I 4603  
 1887 PSR1642-03  
 1926 N 6307  
 1964 MSH 17-209  
 1988 CIT 9  
 1999 N 6435  
 2001 DM 000 6-00 1. ADG359.4-00.1. BTD359.4-00.1. DKM359.4-00.1  
 2002 HFE 33.SGR C  
 2003 SGR A DM 000 1+00 0. MUL03. DGVW096.W24  
 2004 HFE 35.CTB 42.DM 000 2+00 0. NH 000.2-00.1  
 2006 HFE 36.DM 000 5+00.0  
 2013 SHARP. 19  
 2030 N 6510  
 2046 ADG005.9-00.4  
 2048 ROBERTS 80  
 2049 HFE 41  
 2050 N 6514. ADG007.0-00.2. SG 007.0-00.3. GD 007.0-00.3  
 2051 ADG008.1+00 2. GD 008.1+00.2  
 2052 HFE 46.N 6523.W 29.MH 006.0-01.2. KES58. GS 006.0-01.2. GD 006.0-01.2. ADG006.0-01.2. CTB 46  
 2078 W 31. KES52. GD 010 2-00 3. MH 010.2-00.3. GS 010.2-00.3. ADG010 2-00 3. SG 010.2-00.3  
 2090 W 33C. GD 12 8-00 2. KES54. ADG012.8-00.2. GS 012.8-00.2. SG 012.8-00.2  
 2094 GD 013.9+00.3. ADG013.9+00.2  
 2103 SHARP. 44  
 2105 ADG014.6+00.1. GD 014.6+00.0  
 2107 GD 012.5-01.1  
 2108 SG 018 2+01 9  
 2113 SHARP. 34.4 35. KLNS 31. GS 018.7+02.0. GD 018.7+02.0. SG 018.7+02.0. AMW 41  
 2117 N 6611. GS 017.0+00.9. SG 017.0+00.9. GC 017.0+00.9. KLNS 32. ADG017.0-00.8  
 2120 SG 018.9+01 8  
 2124 HFE 55.MH 015.0-00 7. ADG015.1-00.7. GD 015.0-00.7. GS 015.0-00.7. KES66. KLNS 33. W38  
 2147 SHARP. 53. ADG018 2-00.3. GD 018.2-00.3  
 2153 CTB 53. GD 019.0-00 3. ADG019.1-00.3. AMW 44  
 2157 GD 018.9-00 4. ADG018.9-00.4  
 2161 GD 019.6-00.2  
 2169 GD 020.7-00 1. ADG020.7-00.1. KES68  
 2174 RCW 169  
 2177 D4453. SG 028.8+03.5. ADG028.8+03.5. NRA0567. GS 028.8+03.5. KLNS 36. KES74  
 2188 SG 022.8-00 2. GS 022.8-00 5. ADG022.8-00.3. GD 022.8-00.3  
 2189 4CP14 698  
 2190 SG 024.5+00 5. GD 024.5+00.5  
 2193 MSH 18-008. W41. GS 023.3-00.3  
 2194 ADG023.9+00 2. SG 024.0+00 2. GS 024.0+00 2. GD 023.9+00.1  
 2195 GD 023.4-00 2. ADG023.4-00 2. GS 023.4-00 2. SG 023.4-00.2  
 2200 SG 024.2+00 1. ADG024.8+00 1. GD 024.8+00 1. CTB 57  
 2202 ADG024.7-00 1. GD 024.7-00 1. SG 024.7-00.2  
 2203 SHARP. 59. W 42. GD 024.5-00 2. SG 024.5-00.2  
 2207 GD 025.8+00.2  
 2210 GS 025.4-00 2. ADG025.4-00.2. NRA0572. GS 025.4-00.2. SG 025.4-00.2. KES72  
 2211 GD 026.5+00 4. ADG026.6+00.4  
 2223 BK 026.6-00 1. ADG026.6-00.1  
 2238 BK 028.8+00.2

## REMARKS

2245 BK 029.9-00.0.ADG029.9-00.0.SG 029.9-00.0.GS 029.9-00.0  
 2249 ADG030.3-00.2.BK 030.4-00.2.SG 030.4-00.2  
 2251 HFE 57.7-43.BK 030.7-00.0.MH 030.8-00.0.KLNS 41.ADG030.8-00.0.GS 030.8-00.0.SG 030.8-00.0.MES76  
 2258 BK 031.4-00.2.ADG031.4-00.3  
 2271 ADG034.3-00.1.NRA0584  
 2284 W 45.W45.ADG040.5-02.5  
 2303 ADG037.8-00.3.SG 037.9-00.4.GS 037.9-00.4  
 2304 KLNS 45.GS 035.2-01.9.ADG035.2-01.7.SG 035.2-01.8  
 2319 DGM120  
 2334 W 49.WM 043.2-00.0.ADG043.2-00.0.CTB 68.NRA0598.GS 043.2-00.0  
 2341 NRA0600.ADG045.1-00.1.SG 045.1-00.1  
 2345 SG 045.5-00.1.DKN045.5-00.1.ADG045.5-00.1.NRA0601.GS 045.5-00.1  
 2359 ADG046.5-00.2.NRA0605  
 2361 W 51  
 2371 ADG048.6-00.0.GS 048.6-00.0.WY 048.6-00.0  
 2376 GS 048.9-00.3.DKN049.0-00.3.ADG049.0-00.3  
 2378 GS 049.4-00.3.LME471  
 2379 4C+14.70.NRA0608.GS 049.2-00.3.W51  
 2381 WY 049.4-00.4.MH 049.5-00.4.ADG049.5-00.4.GS 049.5-00.4.BEN53.3C400.0  
 2408 ADG054.1-00.0  
 2420 B2 1933+33  
 2454 ADG060.9-00.1  
 2455 ADG061.5-00.1.PKS1944+25.0  
 2460 CTD116.ADG063.2-00.5  
 2492 ADG069.9-01.6.B2 1959+33A  
 2495 SHARP. 100.HFE 63.B2 1959+338.ADG070.3-01.6.W58  
 2534 VRC26.20.01  
 2544 BRIGHT NEB  
 2545 ADG074.8-00.7.DKN074.8-00.6  
 2565 I 1318.SHARP. 1C8.PD04.DR04  
 2576 OM.240.M3M 20-206  
 2578 YW34.PD06.DR06  
 2586 DR07  
 2593 PD09.DR09  
 2612 YW45.PD18  
 2615 DR19.PD19  
 2624 DR21.MH 081.7-00.5  
 2636 PD25  
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 2911 4CP08.67.OY+045.4C+08.67  
 2963 VRO59.22.02  
 2985 915-3376  
 2987 N 7419  
 2991 SHARP. 148  
 3008 OY+099  
 3020 OZ+505  
 3022 I 1470  
 3036 I 1472  
 3053 SHARP. 159  
 3159 VRO20.23.03  
 3161 N 7768

# REFERENCE LIST FROM OSU RADIO CATALOG VERSION RA 36

<u>Survey Prefix</u>	<u>Reference</u>
ADG	Altenhoff, W.J., Downes, G.S., Goad, L.E., ET. ASTR. Astrophys. Supplement No. 1, 1970.
AMWW	Altenhoff, W.J., Mezger, P.G., Wendker, H.J., A., Westerhout, G., Publ. Univ. of Bonn Obs., No. 59, 1960.
AD	Personal Letter from John Sutton, 1969 (Arecibo Occultation).
BEN	Bennett, A.S., M.N.R.A.S., <u>127</u> , 3, 1963.
BK	Beard, M. and Kerr, F.J., Austr. J. Phys., <u>22</u> , 121-6, 1969.
BP	Bailey, J.A. and Pooley, G.G., M.N.R.A.S., <u>138</u> , 51, 1968.
BTD	Beard, M., Thomas, B.M. and Day, G.A., Aust. J. Phys. Astrophys. Suppl. No. 11, Oct 1969.
B2	Roub, Publ. Univ. of Bologna, Contrib. 55, 1969.
CTA	Harris, D.E. and Roberts, J.A., Pub. A.S.P., <u>72</u> , 237, 1960.
CTB	Wilson and Bolton, Cal. Tech. Rad. Obs. Report No. 2, 1960, 1963.
CTD	Kellermann and Read, Cal. Tech. Rad. Obs. Report No. 2, 1965.
DA	Galt, J.A. and Kennedy, J.E.D., A.J., <u>73</u> , 135, 1968.
DGVW	Davis, M.M., Gelato-Volders, L. and Westerhout, G., B.A.N., <u>18</u> , 42, 1965.
DKM	Milne, D.K., Austr. J. Phys., <u>24</u> , 1971.
DM	Downes, D. and Maxwell, A., Ap. J. No. <u>146</u> , 653, 1966.
DR	Downes, D. and Rienhart, R., Ap. J., <u>144</u> , 937, 1966.
DW	Davis, M.M., B.A.N., <u>19</u> , 201, 1967 (Dwingeloo)
GD	Goss, W.M. and Day, G.A., Austr. J. Phys. Astrophys. Suppl. 13, APR 1970.
GS	Goss, W.M. and Shaver, P.A., Aust. J. Phys. Astrophys. Suppl. <u>14</u> , 1, 1970.
HM	Hoskins, D.G., Murdoch, H.S., Aust. J. Phys. Astrophys. Suppl. <u>15</u> , 1970.
KES	Kesteven, M.J.L., Aust. J. Phys., <u>21</u> , 369, 1968.
KLNS	Kuzimin, A.D., Levchenko, M.T., Noskova, R.F., and Salomonovich, A.E., Soviet Astronomy Vol. 4, No. 6, 903, 1961.
LHE	Long, R.F., Haseler, F.B., and Elsmore, B., M.N.R.A.S., <u>125</u> , 313, 1963. Full list not published.
MH	Mezger, P.G. and Henderson, A.P., Ap. J., <u>147</u> , 471, 1967.
MSH(1)	Mills, B.Y., Slee, O.B., and Hill, E.R., Aust. J. Phys., <u>11</u> , 360, 1958.
MUL	Muller, Pub. Univ. of Bonn, NR <u>52</u> , 1959.
NB	Branson, N.F.B.A., M.N.R.A.S., <u>135</u> , 149, 1967.

<u>Survey Prefix</u>	<u>Reference</u>
NRAO	Pauliny-Toth, I.I.K., Wade, C.M. and Heeschen, D.S., Ap. J. Suppl. Series, No. 116, 1966.
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## Appendix A

During the past two years several papers have appeared (Cohen,<sup>1, 2</sup> Low,<sup>3</sup> Cohen et al,<sup>4</sup> and Ney<sup>5</sup>) which refer to CRL sources contained in preliminary versions of this catalog. The source designation has been changed. Table A1 cross references the CRL number in the current catalog with the published numbers from the preliminary catalog.

Table 1. Cross Reference of CRL Numbers with Preliminary Catalog Numbers

CRL	Prelim	CRL	Prelim	CRL	Prelim
67	412-0258	2104	416-1858	2370	423-1693
490	508-3363	2135	423-1836	2392	221-0986
618	819-0636	2136	423-1850	2396	213-0509
809	831-0628	2154	217-1228	2425	416-1625
865	603-1212	2155	713-0753	2428	819-2927
915	618-1343	2178	218-1233	2445	216-0646
961	610-1177	2179	408-1819	2494	219-0573
1274	517-1208	2192	409-1810	2513	222-0687
1686	712-1551	2199	212-1080	2591	809-2992
1922	219-1544	2205	218-1192	2679	804-2947
1949	733-1088	2259	213-1011	2688	803-2935
2015	425-1912	2341	217-0693	2885	916-3282
2023	423-1907	2350	218-0973	2985	915-3336
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